

Report of 69th ANNUAL CONVENTION

Pages 13 - 22

JULY - AUGUST 1957



protects against
distemper
hepatitis, o
secon
bacterial pai

## Cor-Hepagen

INFECTIOUS CANINE HEPATITIE VACCINE

- 1-Protection against the commo
- 2—Completely safe for the do

  Easily administered smooth s
  - ested for potency and freed
  - he ideal vaccine for 'booster'

nd Vejar Company

39 W. Pico Blvd. Ingeles 64, California

al City Chemical

215 Second St San Francisco, 9 Northwest

Oregon

Northwest Veterin

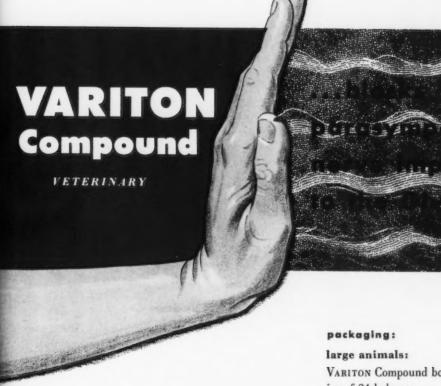
2227 4th Ave. Seattle 4, Washin

CORN STATES COMAHA 2, NEBR



### double therapy

in diarrheas of animals, both anticholinergic and antibacterial



the anticholinergic, diphemanil methylsulfate, decreases peristalsis, reduces secretions and suppresses inflammation

the antibacterial, phthalylsulfacetamide, penetrates all layers of the intestinal wall for more effective treatment of enteric infections Variton Compound boluses, jar of 24 boluses; 6 jars, 24 boluses per jar.

#### small animals:

VARITON Compound Tablets bottle of 100.

VARITON® Compound, brand of diphemanil methylsulfate and phthalylsulfacetamide.



# VARITON cream

diphemanil methylsulfate 2%



relieves itching and speeds healing in "hot spot" eczemas, pustular and nonspecific dermatoses

### STOPS that scratching reflex

#### ... an unusually effective topical agent

Relieves irritation and suppresses inflammation after one or two applications; dries lesions and permits scabs to form. usually in 24 hours. In mild cases complete healing occurs in two to three days.

#### ... prevents spreading and secondary infection

Prompt relief of itching reduces danger of self-mutilation and infection due to scratching.

#### ... well tolerated

No systemic side effects or sensitivity reactions have been observed.

#### AN EXCELLENT DISPENSING ITEM

VARITON inhibits excessive secretion of acetylcholine at nerve endings, the mechanism which triggers pruritus, inflammation and edema.

VARITON Methylsulfate Cream 2%: 50 Gm. tube, boxes of 1, 12 and 72; 20 Gm. tube, boxes of 12 and 72.

SCHERING CORPORATION · BLOOMFIELD, NEW JERSEY

V-VT-J-367

VARITON Methylsulfate, brand of diphemanil methylsulfate, veterinary.

#### PITMAN-MOORE COMPANY

announces

# Thorazin

#### FOR VETERINARY USE ONLY

#### on outstanding record of clinical achievement in both large and small animals

- · induces a state of unique tranquility without clouding consciousness or depressing mental faculties1
- potentiates local anesthetics<sup>2</sup>
- enhances the activity of analgesics and sedatives<sup>3</sup>
- controls nausea and vomiting<sup>4</sup>

Now available to veterinarians in these dosage

2 cc. ampules containing 50 mg. 'Thorazine' in boxes of 6:

Tablets, 10 mg., in bottles of 50;

Tablets, 25 mg., in bottles of 50 and 500

Pitman-Moore Company is sole distributor of 'Thorazine' to the veterinary profession.

References: 1. Martin, J. E., and Beck, J. D.: Am. J. V. Res. 17: 678, 1956. 2. Troughton, S. E., Gould, G. N. and Ander-son, J. A.: Veterinary Record 67: 903, 1955. 3. Brodey, R. S. and Thordal-Christensen, A.: J.A.V.M.A. 129: 410, 1956. 4. Estrada, E., to be published.

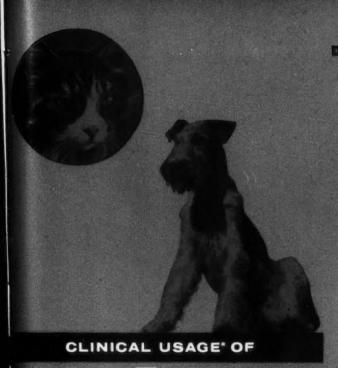
\*T. M. Reg. U. S. Pat. Off., Smith, Kline & French Laboratories, Philadelphia.



PITMAN-MOORE COMPANY
DIVISION OF ALLIED LABORATORIES, INC., INDIANAPOLIS 6, INDIANA







For Hysterical, Nervous or Unfriendly Patients

As an Aid in Medical Treatment (Restraint)
In Surgery
Pre-anesthetic Usage as Replacement for Morphine
In Combination with General Anesthetics
Used Alone for Anesthesia
Anti-emetic Effect
Prior to Anthelmintic Treatment
For Vomiting from Gastritis
For Vomiting from Pyometra
For Vomiting from Other Causes
For Heat Stroke
In Shock Due to Trauma
For Fracture Reduction
For Cough
For Painful Conditions
General
Prolapsed Spinal Disc
Rheumatic Type
For Pain Associated with Otitis,
Ocular Lesions or Wounds
Aid In Breeding
In Convulsive Patients

# Thorazine



Anti-diarrheal Effect
Aid in Oral Medication
Aid in Controlling Severe Pruritus
In Obstetrics
In Chorea Patients
For Frightened or Unfriendly Patients
In Surgery
Aid in Hairball Therapy
Anti-emetic Effect

Horse For Sedation
In Tetanus Cases
In Colic Cases
In Surgery
Cattle For Sedation
In Surgery
To Relax Penis of Bull

Swine For Sedation
Gogts For Sedation
Sheep For Sedation

Amazi

VITAMIN-MI

ARMOUR

amina

with the canine

dogs love it! beg

TABLETS ACCEPTED FREE

- simple to administer
- excellent conditioning agent for skin and coat
- · eliminates problems of finicky e
- vitamin-mineral deficiency readi corrected with Caminal S
- sick and normal dogs eat their f

For complete Technical data Write: Manager Professional Relations **Armour Veterinary Laboratories** P.O. Box 511, Kankakee, Illinois

SUPPLY: Bottles of 50 Tablets.

NOSE

TASTE

## EVEN IN STUBBORN SKIN CONDITIONS



## **DESITIN** ointment

rich in cod liver oil

#### SPEEDS HEALING

in wounds · burns
ulcers (external)
postpartum perineal tears
eczemas · sore cracked teats
otitis externa



Jars of 1 lb., tubes of 1 oz., 2 oz., 4 oz.

DESITIN OINTMENT soothes, protects, lubricates, eases pain, itch, irritation



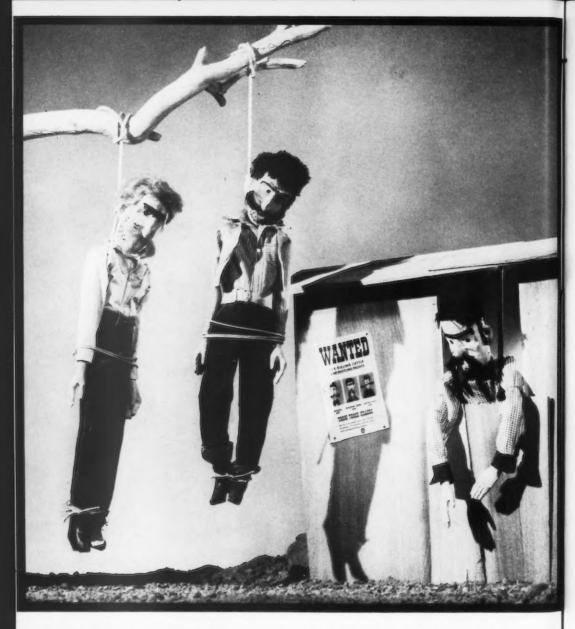
WRITE FOR **SAMPLES**AND LITERATURE

VETERINARY DEPARTMENT

DESITIN CHEMICAL COMPANY

812 BRANCH AVENUE

PROVIDENCE 4, RHODE ISLAND



### **HANG TWO**

ANDJAIL WITH

ONE PRODUCT GETS ALL THREE ...

builds long-time immunity against BLACKLEG

builds long-time immunity against MALIGNANT EDEMA

builds seasonal resistance against Shipping Fever (HEMORRHAGIC SEPTICEMIA)

And Blacklegol "S-HS" is fortified with Alhydrox®, a Cutter exclusive, that holds vaccine in the animal's tissues, releasing it slowly to build peak immunities.



BLACKLEGOL"S-HS"

CUTTER Laboratorie

#### THE CALIFORNIA VETERINARIAN

#### JULY-AUGUST, 1957

#### Contents

P	age		Page
President's Message		Opportunities	. 34
Report, 69th Annual Convention	13	Laboratory Notes	. 35
Some Observations and Experiences in Thailand,		Graduates, Davis, 1957	. 36
David E. Madsen	23	The Nutritive Value of Canned Pet Foods,	
Reports of Committees	26	Charles F. Williams	. 31
Dr. Simms Goes to Turkey	27	Our 1957 Graduates	. 37
Old Youngsters Gather	27	Secretary Travers Honored by Exhibitors	. 38
Management of Skin Diseases in Dogs,		Marmon, Prexy, Corn States	
Howard F. Carroll	28	Out-of-State News	
Women's Auxiliary Report		Applicants	. 39
Public Relations Scripts, Kenneth G. McKay		In Memoriam, Mrs. Gladys R. Cooke	. 39

#### Index to Advertisers

Page	Page
American Cyanamid54, 55	National Casualty Co 47
Armour Laboratories 8	Norden Laboratories 29
Calo Dog Foods Co., Inc	Parke, Davis Company 50
Corn States Laboratories, Inc 2	Pfizer Laboratories
Cutter Laboratories 10	Pitman-Moore Company 6. 7
Desitin Chemical Company 9	Research Laboratories 59
Ethical Veterinary Supply Co 47	Schering Corporation
Fort Dodge Laboratories, Inc 46	E. C. Smith Co
Fromm Laboratories, Inc 56	Squibb
Haver-Lockhart Laboratories	Upjohn Company 49
Hill Packing Company 40	Warner-Chilcott
Jensen-Salsbery Laboratories, Inc Back Cover	Whitmire Research Laboratories 45
Kal Kan Foods, Inc 43	Whitmire Research Laboratories 45 Winthrop Laboratories 48
S. E. Massengill Co	Wyeth Laboratories
D. W. Morris 45	

- Officers: Fred B. Walker, Jr., President; Richard L. Stowe, First Vice-President; Charles H. Ozanian, Second Vice-President; E. R. Braun, Third Vice-President; Russell P. Cope, Treasurer; Charles S. Travers, Executive Secretary; Gilbert JACKSON, Sergeant-at-Arms.
- Executive Committee: Richard L. Stowe, Chairman; Fred B. Walker, Jr., Charles H. Ozanian, Russell P. Cope, E. R. Braun, Ernest H. Houchin, A. Mack Scott.
- Board of Governors: FRED B. WALKER, JR., President; A. MACK SCOTT, Past President; RICHARD L. STOWE, First Vice-President.
- Editorial Staff: CHARLES S. TRAVERS, Editor; HERB WARREN, Assistant to the Editor; A. M. McCapes, Frank P. Mathews, Donald E. Jasper.
- Associate Editors: Research—H. S. CAMERON, D. C. LINDLEY, O. W. SCHALM; Public Health—Ben Dean; Small Animals—W. J. ZONTINE; Foreign Reviews—S. Z. ZAKS; Animal Sciences-John F. Christensen; Large Animals-Charles H. Reid, R. V. JESSUP, N. L. ROTHENBERG.
- AVMA Representatives: Executive Board, Dist. VI-Joseph M. Arburua, San Francisco; House of Representatives—Charles J. Parshall, Hayward; Fred B. Pulling, Jr., Atascadero (alternate); Resident Secretary—E. E. Jones, San Gabriel.
- Board of Examiners in Veterinary Medicine: President, W. J. Zontine; Vice-President Philip A. McClave; Secretary, Gaylord K. Cooke; R. A. Ball, William K. Rid-DELL; Investigator, LEO E. WELLS.

In addition to members of the CSVMA, the following states also receive THE CALIFORNIA VETERINARIAN: Arizona, Idaho, Montana, Nevada, New Mexico, Oregon and Washington.

#### Volume 10 Number 4

Published Bi-Monthly by the California State Veterinary Medical Association, 3004 16th Street, San Francisco 3, California, Devoted to promote Veterinary Science, to increase the esteem of the general public for the veterinarian, to protect his rights and privileges and to elevate the standard of the profession generally in scientific intercourse. Address all communications to The California State Veterinary Medical Association, Charles S. Travers, Executive Secretary, Please notify us immediately of incorrect address or change of address.

Unsolicited manuscripts are at sender's risk, and when received will not be returned unless accompanied by return postage. The Association is not responsible for views of contributors and we reserve the right to edit and condense articles. Publication of advertisements is not considered an endorsement of the product or services involved. Advertising rates will be furnished upon request. Yearly subscripton, \$3.00, payable in advance. (Copyright, 1957, by California State Veterinary Medical Assn.—Reproduction Prohibited Without Permission.)

JULY-AUGUST, 1957

EMA

### President's Message



I am happy and proud to serve as President of the California State Veterinary Medical Association. Our Association has grown tremendously in number of members and in the scope of its activities. Our officers the past year, led by Dr. A. Mack Scott, did an excellent job in a difficult year. Dr. Scott and his staff of officers had many extra worries with legislative problems as well as the routine business of the group and the management of two excellent meetings. I hope with the help of our able secretary to keep up the good work.

Our main problems this year will be the re-organization under our new by-laws which were passed at the June meeting, and planning for better preparedness to cope with legislative problems next year.

The Executive Committee is continuing work on future planning for the Association. Some projects are complete and will be carried out as soon as we are financially able.

I hope I will have the support of every one of you this year. If any of you have any ideas at any time that you feel will help our organization please feel free to present them to me or the executive committee. We are eager to make this a big association year.

FRED B. WALKER, JR., D.V.M.

#### Report of the Sixty-ninth Annual Convention of the California State Veterinary Medical Association

All who have passed along Highway 101 just south of Santa Barbara have been attracted by the blue roofs of the Miramar Hotel and the gay beach umbrellas around the swimming pool on the lawn. Behind the hotel is the beach and ocean, and both cottages and rooms were available at what is a reasonable price for such facilities.

The meeting rooms were adequate in size, and the exhibit room in the convention hall was spacious and well arranged.

Attendance was in excess of 400. Those who came had a grand time, and learned a good many useful things; those who stayed away lost a good deal not only for themselves but for the Association.

#### Monday Afternoon

#### GENERAL SESSION

The 69th meeting of the California State Veterinary Medical Association was opened at 2:10 p.m. by President Scott. After the invocation by Father Joel Scott, O.F.M. (from the Old Mission), the popular Floyd Bohnett, newly elected mayor of Santa Barbara, extended a very gracious welcome, brief and cordial. President Scott responded, remarking that we have had several meetings in Santa Barbara, and enjoyed them all. He also spoke with pride of the fine showing our members have made nationally, with special reference to the San Antonio meeting of the AVMA and the recent AAHA meeting at San Francisco. He praised the fine work of the local committee, headed by Dr. Ward.

The first speaker, Dr. Glen Dunlap, Vice-President of Production and Research for Haver-Lockhart in Kansas City, spoke on recent trends in rabies vaccine, remarking that there has been more of a landslide than a trend towards the chick-embryo vaccine.

#### **Trends in Rabies Immunization**

GLEN L. DUNLAP, D.V.M. Vice-President, Production-Research, Haver-Lockbart Laboratories, Kansas City, Mo.

As the years pass by and more information is gained, the use of chick-embryo rabies vaccine is becoming more widely accepted in rabies prevention programs. With the use of this new vaccine many communities are permitting an extension of the inoculation period from an annual basis to two, three, or even four years.

The production figures for rabies vaccine show that more vaccine of the chick-embryo type is being produced than of phenolized vaccine.

The safety of the product for dogs has been well established. It is estimated that between 8 and 10 million dogs have been inoculated

with this vaccine. The safety of the product for animals other than dogs has not been established. The chick-embryo rabies vaccine now produced for use in dogs should not be used for cattle or for descented pet skunks. Its use in cats is being permitted in some states.

In answer to questions, Dr. Dunlap said that for small dogs, less diluent may be used (1.5 cc.), giving the same dose in less volume. He explained that the vaccine is necessarily a thick suspension, since it is the sediment that immunizes and not the supernatant fluid.

The next speaker was Dr. Kenneth G. Mc-Kay, Extension Veterinarian of the University of California. A résumé of his tape recordings will be found elsewhere in this issue.

#### **Veterinary Public Relations Scripts**

KENNETH G. McKAY, D.V.M.

Extension Veterinarian, University of California, Davis

At this time I wish to express my appreciation to the members of the Program Committee for the opportunity to summarize the veterinary public relations scripts.

Dean Jasper, of the School of Veterinary Medicine, invited me to take the leadership of this project on the Davis campus. I invited George F. Hafer, the Agricultural Extension Service information specialist, on radio and television, to assist me in getting "tape" that would be acceptable to radio stations and that would be a credit to the veterinary profession.

To Dean Jasper, Mr. Hafer, the faculty of the School of Veterinary Medicine; Dr. E. F. Chastain, Assistant Chief of the Bureau of Livestock Disease Control; Dr. C. L. Gooding, Veterinarian-in-Charge Animal Disease Eradication Branch of ARS-USDA, Sacramento Station; and finally to my colleague, Dr. A. S. Rosenwald, Extension Poultry Pathologist of the University of California, I wish to acknowledge my appreciation for their cooperation.

The "tapes" will be made available to the Secretary of the California State Veterinary Medical Association for reproduction and distribution. The Agricultural Extension Service will mimeograph the interviews and make them available on a county level to our staff responsible for livestock projects and who also have radio commitments at the county level.

#### Corticosteroids in Veterinary Practice

Dr. W. G. Robertson, Schering endocrinologist, began his talk by emphasizing the fact that these hormones are not cure-alls although they are useful in a variety of ailments. Animals under stress show an increase in corticoids in the bloodstream; since liver function is decreased, the increase is due partly to lack of inactivation of the hormones and not entirely to an increase in output. After the initial

rise, the adrenal gland stops production, and the level drops to below normal.

It is known that these hormones are antiinflammatory and that they are a boon to
arthritis sufferers. They are also useful in
infectious conditions when given in conjunction with a suitable antibiotic. In foot rot, for
example, you treat both the infection and the
inflammation simultaneously. The same system applies in pneumonia of cattle. However,
to give the hormone without the antibiotic
would be disastrous. The gluco-corticoids also
attack connective tissue, so they are useful in
such diseases as mastitis to prevent overgrowth of connective tissue.

It has been determined that the uptake from blood of cattle is very rapid for the first five minutes and then the hormone is gradually eliminated within the next hour. The distribution factor is 57% of the body weight, regardless of the dose. This means that a 1000-lb. animal takes up about 85 mg. of an intravenous dose, and any excess given is wasted. If you want to give more than this, you can give it in split doses twelve hours apart, or in three doses eight hours apart.

The uptake in dogs has not been determined, but 10 to 20 mg. would probably be suitable for a 25-lb. dog; here again it should be given

in split doses.

One often hears that giving cortical hormones depresses the adrenal cortex, but there seems to be no evidence for this. Dogs given 25 to 50 mg. daily for two years had absolutely normal adrenals so far as could be determined.

Uptake is slower when injected intramuscularly, but not much slower. A long-acting form, such as is available for progesterone, has been impossible to produce so for systemic effect one dose is short-acting. For local use, as for arthritis, the acetylated form will stay put, with practically no systemic effect.

One listener reported that he believed a course of this therapy had caused rapid aging in some of his patients. Dr. Robertson was interested and said he had no evidence to corroborate this observation; the Thorne group had found a definite change in production of steroids with advancing age, but had not noted that the hormone caused aging. A two-year course did cause some abnormal obesity, more water in the tissues, and negative nitrogen balance, but these dogs had a high dose over an extremely long period of time.

#### **Business Meeting**

The meeting was opened by President Scott at 4:25 p.m. We learned that 100% of the graduating class had been signed up by Mr. Travers, and the membership stands at present at 1078. Life membership was conferred on Dr. J. F. Ast of San Mateo and Dr. Clarence D. Hoover of Stockton.

Dr. Collinson reported on Senate Bill 1461,

the rabies bill, and Bill 3910 on pregnancy diagnosis. This bill was killed in committee; the others passed both houses and were on the Governor's desk.

Dr. Zontine spoke concerning the new constitution and by-laws, which were then

adopted unanimously.

The new gold life-membership cards were passed out to the life members present. The new officers were then elected: Dr. Walker, president; Dr. Stowe, Dr. Ozanian and Dr. Braun, vice-presidents; Dr. Cope, treasurer; and Dr. Houchin, Member at Large of the Executive Committee. Dr. Collinson was also nominated for this office, but he gracefully withdrew his name and won a standing ovation. The new officers were installed by Dr. George Hart.

Dr. Scott announced that the 1958 meeting will be held at San Jose and that invitations for 1959 will be considered at the January

meeting.

The local committee was honored for its work in making the meeting a success, and Dr. Scott received a special standing applause for his years of good work for the Association. The meeting adjourned at 6:20 p.m.

#### **Tuesday Morning**

#### SESSION ON PETS

#### Indwelling Catheterization for the Relief of Feline Cystitis

Dr. Harold Burroughs of Van Nuys told his method of relieving obstructive cystitis in the cat. This condition occurs only in the male (altered or not) and is largely due to spasm of the urethra. There is also atony of the bladder, acute cystitis with pain, and products of inflammation. Calculi are rarely present. Systemic drugs, including antispasmodics, rarely relieve the spasm. He has tried many local anesthetics, the most potent being most satisfactory, and has settled on Pitman-Moore's Diclone. The action appears in seconds and lasts eight to twelve hours. He uses atropine or scopolomine followed by Surital for inserting the catheter. First, a blunt 34-inch, 20gauge needle is inserted into the urethra and steady pressure on the plunger for thirty seconds to a few minutes will clear the passage; urine then flows. Polyethylene tubing (5 to 6 inches long) with a 20-gauge bore is inserted well into the bladder and allowed to protrude a quarter inch out of the penis. It is sutured in place well back from the tip, with the knot on the dorsal side. Zephiran 1:5000 is used to wash the bladder if inflammatory products are present in quantity. When the return flow is clear, 5 cc. Diclone is injected and this is repeated twice daily. Penicillin is used as indicated, and if inflammatory products accumulate, lavage is used freely. The catheter is not



Executive Committee, CSVMA. Standing, left to right: Dr. Charles H. Ozanian, Dr. Fred B. Walker, Jr., Dr. A. Mack Scott, Dr. Ernest H. Houchin. Front row: Dr. Richard L. Stowe, Dr. Russell P. Cope and Dr. E. R. Braun.

removed until the urine is crystal clear, there is no albumin, and no spasm. There is no dribbling of urine after the first or second day. If the condition is fully relieved it is less likely to recur.

The next speaker was Dr. Knowles of Miami. He advised using one tranquilizer, knowing it thoroughly, rather than a dozen, since they all differ in effect.

#### Tranquilizers-Versatile Servants

JACK O. KNOWLES, V.M.D. Practitioner, Miami, Florida

Tranquilizers are a new group of drugs which are proving very valuable to veterinarians. They serve as a means of "chemical restraint" and will facilitate the management of patients who either are refractory or who must undergo difficult or uncomfortable treatment. They are useful in instances such as restraint for x-ray therapy, tooth cleaning, throat examination, etc.

These drugs also play an important part as adjuncts to anesthesia, some of them serving to relax animals prior to anesthesia. Some of them actually potentiate barbiturates and are being used as part of the total anesthetic procedure.

There are several excellent tranquilizers, each having specific properties that makes it

most useful in certain particular classes of therapy. These will be outlined and discussed.

The next speaker was Dr. Banks, Professor of Veterinary Radiology at Texas A & M. He showed a series of very clear radiographs in which the differentiation of malignant from non-malignant lesions was excellent.

When animals are presented to the practioner showing evidence of skeletal involvement, a radiogram is commonly made. The problem to a practitioner is first: What is the diagnosis?

A number of conditions are depicted by the radiographs. They are considered to be typical of both malignant and non-malignant skeletal involvements. It is felt that by noting the radiographic lesions along with history and clinical examination, a diagnosis can frequently be made.

Dr. Simpson of Lederle then gave a review of the literature on leptospirosis. Dihydrostreptomycin and tetracyclines are still the best drugs for treatment, and sanitation the best preventive.

#### SESSION ON LIVESTOCK

Dr. Barsaleau's excellent presentation on the advantages of large-animal clinics will be published in a future issue.

Dr. Casselberry, Veterinary Medical Direc-

tor of Cutter Laboratories, then discussed the Sterne vaccine for anthrax.

#### Newer Aspects of Anthrax Immunization

N. H. CASSELBERRY, D.V.M.

Veterinary Medical Director, Cutter Laboratories, Berkeley, Calif.

In the evolution of anthrax vaccines, following Pasteur's original attenuation of the anthrax organisms to 1 and 2 vaccine attenuations, field evaluation in this country over a period of years has indicated the apparent necessity of more virulent 3 and 4 spore vaccines, rendered safe by adsorbents such as aluminum hydroxide and irritants such as saponin, or by injection intradermally, or administration of serum simultaneously. These vaccines have been quite satisfactory for cattle but have presented some problems in immunization of highly susceptible sheep and horses, particularly in hot weather, and are quite unsafe for immunization of goats.

The ideal immunizing agent from the safety standpoint would, of course, be an inactivated one but such products have not been sufficiently immunogenic. However, the South African experience, after mass use of a vaccine prepared from their nonencapsulated. avirulent, Sterne Strain vaccine, has indicated such a projuct to be safe for all domestic farm animals and capable of producing a high degree of immunity in known bad exposure areas. For the past two years, the South African type vaccine, prepared from their nonencapsulated, avirulent culture, has been available in the United States. Wide use in known bad areas confirms the South African experience and indicates it to be a highly effective anthrax vaccine. Both laboratory and field experiences indicate prompt immune response to vaccination with a protective immunity in about seven days. In addition to being found a safe and highly effective vaccine for protecting cattle, it has been found safe for immunization of sheep even during hot weather. It also appears safe for horses, but swellings of varying degree have been observed at the injection site. The only excessive reaction from vaccination has occurred in Shetland ponies and was evidenced by severe swellings in a few individuals; and that reaction was deemed due to the irritating action of the saponin used as an adjuvant in the product.

The paper of Mr. Bramhall, Assistant Ventura County Farm Adviser, brought us up to date on the ever-present problem of molybdenum poisoning.

#### Molybdenum Poisoning in Livestock

ERVIN L. BRAMHALL

Assistant Ventura County Farm Adviser, Ventura First discerned in England in 1938, molybdenum poisoning of sheep and cattle through forage on pastures containing a high mineral molybdenum has since been found in several states in America and specifically in California in the following counties: Madera, King, Fresno, Kern, Santa Barbara, Riverside, Ventura, and Los Angeles.

Legume plants seem to take up more of the heavy element from the soil than grasses both on irrigated as well as range pasture, in varying degrees, depending on the species of the legume plant.

Ten to twenty parts per million constitute state of toxicity to develop in cattle the symptoms of diarrhea, stiffness, change in hair color, loss of weight, and death. The two latter symptoms are usually more severe in growing stock. Dairy cattle, with no other visible symptoms, may show a reduction in milk production.

Testing for molybdenum content should be made from plants that are lush and in the fast growing stage.

Treatment procedure is the feeding of copper sulfate in:

- (1) drinking water
- (2) salt mixture
- (3) mixing it in feed, taking care that in so doing, the animals involved do not consume more than 1/2 to 1 gram per head per day in the total daily mix.

It was a pleasure to have with us again the Chairman of the Department of Clinical Medicine and Surgery at Pullman, Dr. Ott. The first of his presentations closed the morning livestock session.

#### Equine Radiology-Diagnosis and Therapy

RICHARD L. OTT, D.V.M.

Chairman, Department of Clinical Medicine and Surgery, State College of Washington, Pullman, Wash.

Safety is the factor of prime importance in any discussion of this subject. Radiological safety might be defined as that subject which most veterinarians understand but which a large proportion ignore. Safety features, including not only the well-known leaded apron and gloves but also machine filters and personnel monitoring service to determine rate of exposure, must be stressed in equine prac-

Equine diagnostic roentgenology can be efficiently and safely performed with a minimum of equipment and a maximum of common sense. A few simple rules must be observed. A tentative diagnosis is essential so that the patient may be properly positioned. Cassette holders can be easily constructed and should be used. They not only eliminate a great deal of unnecessary film motion but also add greatly to the safety of the operation. The arithmetic of film exposure and development is a simple procedure once the proper position

has been determined. The most promising, recent development for the equine practitioner

is the use of polaroid film.

Radiological therapy is, for the most part, best left in the hands of a few experts; however, the general practitioner must keep abreast with the developments in this field. He should understand the reasons for radiological therapy and what it can be expected to do. He should also understand the basis of radiological dosage—the idea of quantity and quality.

Radiology, sensibly and properly applied, can be of great service in equine practice. The danger in this field must not be underesti-

mated.

#### Question and Answer Luncheon

As is usual, this feature attraction drew a large number of practitioners. Dr. Ozanian took over as moderator after Dr. Crundwell had been called away on an emergency. There were no written questions this time, and the session was entirely ad lib. A compressed version of the information brought out follows.

**Leptospirosis, Dr. Simpson.** Q. What is the dose of dihydrostreptomycin?

- A. 20 mg/kg/day, in divided doses, preferably three. This will eliminate the leptospiremia and leptospiruria. Tetracycline is used in the same dose.
  - Q. How long do you treat the dog?
  - A. Advise treating for three days.
- Q. What about cases diagnosed as leptospirosis that can't be transmitted to other dogs? (How many dogs and how was the contamination done?) The sick dog was put in the run first, other dogs followed, walking in the urine. Some urine was put in the drinking water. Have understood that a rodent was always involved.
- A. One case on the basis of clinical evidence is not an experiment. *Icterohemorrhagiae* is spread by the rat and mouse, but *canicola*, which is 90% of the cases in dogs, is transmitted only by dogs and not carried by rodents.
  - Q. What is the duration of vaccination?
- A. Don't know; hope to find out when the new research plant at Pearl River is finished. Now we advise revaccination every year.
  - Q. What is the age incidence?
- A. Primarily in dogs over six months old, and in four males to one female. Older animals are generally thought to be more susceptible.
  - Q. What is the incidence of Weil's disease?
- A. Don't know; about 600 in five years from 1946 to 1957. There is a write-up by Rosenberg in the AMA Journal.
- Dr. McInnes: We have found the odor pathognomonic, and that males are much more

susceptible, probably because they are more nosy.

Dr. Simpson: Similar odors of uremia and decomposing blood in the mouth, and the decomposing blood and bile in the vomitus occur with other diseases. The uremia odor comes late in the disease.

**Tranquilizers, Dr. Knowles.** Q. You said there are a variety of results with tranquilizers in different dogs, and the individual dose varies. Will the dose vary also in the same dog at different times?

- A. You use less intravenously than by mouth, maybe 75 to 80% of the dose.
- Q. Do you use tranquilizers routinely in shock, caesarean or toxic endometritis?
- A. It is used for preanesthetic before barbiturates, but we don't use barbiturates in caesareans. We use something like the tranquilizer and then local anesthesia. The same is true for endometritis. We don't use general anesthesia in debilitated patients. We use it before barbiturates in extensive surgery, as of the chest, but not just to prevent shock. Shock prevention is merely the latest published use.
  - Q. Will they pass the placental barrier?
  - A. No, barbiturates do but not tranquilizers.
- Q. Will they pass through the milk of a nursing bitch?
- A. Probably not, or not enough to matter. They are very safe, the lethal dose is about 100 times the therapeutic dose. *Time* says that Carnation uses Miltown.

(Comment: how contented can they get?)

- Q. There are lots of kinds; is any one preferred for general use?
- A. Prefer the one with which you are most familiar. There are 10 or 15 good ones. Choose one and learn it thoroughly. Try to get one without any sedative effect. You don't need a dozen of them.

**Radiography, Dr. Ott.** *Q*. What is the technic of radiographing the stifle joint of a horse where damage to the fibula is suspected.

- A. Ordinarily, we use almost a straight lateral beam aiming from posterior to anterior, facing the beam slightly behind and left to put the patella slightly out from the distal end of the femur. For seeing the fibula, reverse the beam. The joint will be distorted. In the bovine there is, as in the dog, trouble with erosion of the meniscus. Operation is unsatisfactory because they put weight on it immediately. The erosion will not show on the radiograph. It is often referred to as fracture of the tibia. The joint gives on pressure.
  - Q. What about the camera unit?
- A. The unit in operation is handled through the Picker group. It will be two or three years

before the cost is low enough to be practical. *Dr. Thom:* It costs about \$1,200, and the cassettes about \$12 to \$15 at present.

General, Q. What is a successful treatment for ear mites?

A. (various sources) Paloderm, Warren-Teed, every five days. . . . NL solution was recommended to me and I have used it for two or three years. . . . Just a detergent is good, it kills them. . . . They just go on scratching.

Q. Is there a vaccine for psittacosis? I heard a rumor one was made in Berkeley.

Dr. Casselberry: No, there is none. Probably the rumor refers to a possible agglutinating agent for diagnosis. Tetracycline in oil is used to treat psittacosis. An impregnated feed is being tested but is not on the market.

Q. We hear a lot about the abomasum displaced to the left under the rumen, but never see any.

Dr.Ozanian: I'd like to know about that too.

Dr. Ott: This condition was diagnosed on the coast of Washington, but when they brought one over it wasn't present. Don't know where these are being seen. There is an increasing number of impactions, but no displacements.

Dr. Ozanian: There is supposed to be a different type of regurgitation.

Dr. Twohig: In a phone conversation with Dr. Karl Meyer, he said that 80% of all parakeets and canaries with respiratory trouble have psittacosis. To determine it the bird has to be sacrificed. It costs \$9 to run the test. It is transmitted by the dust of the feathers and the droppings. One should buy from a certified aviary.

Q. How long does the Sterne vaccine for anthrax last, and how about using it in hot areas, and to what extent is serum useful, if at all, in an outbreak?

Dr. Casselberry: They are protected for seven and a half months. It has been used where they were in the habit of using No. 2 vaccine; there we would recommend two doses of Sterne vaccine. It has not been used extensively as other types, but was used selectively and without any trouble. Serum is probably as acceptable as with any spore vaccine. In an explosive outbreak, simultaneous serum would be indicated. In a sporadic outbreak you might choose to gamble and vaccinate only, treating cases as they occurred; you would have to watch them carefully.

#### Tuesday Afternoon

#### SESSION ON PETS

The afternoon session began with Dr. Ott's second paper.

#### Canine Orthopedic Surgery

RICHARD L. OTT, D.V.M.

Chairman, Department of Clinical Medicine and Surgery, State College of Washington, Pullman, Wash.

Orthopedic surgery has advanced tremendously in the years following the development of the Stadar external fixation splint. Surgical invasion of joints, prosthetic replacements for parts of joints, laminectomies and hemilaminectomies are but a few of the operations which, if not commonplace, are being performed rather often today. In addition, many new technics in orthopedic surgery are being reported in the current veterinary literature.

It might seem that more time should be devoted to teaching "procedures" and less time to the teaching of the basic principles of surgery. Nothing could be farther from the truth. A veterinarian, with a good knowledge of anatomy and physiology, who adheres to sound surgical principles, can adapt to changing technics where such change is advantageous.

The fallacy of attempting orthopedic procedures without a basic understanding of anatomy and physiology can best be illustrated by examining a few slides of case histories. Often the procedure may be faultlessly performed, but the operation is a failure because the surgeon did not understand the function of the part. Abuse of basic surgical principles in orthopedics leads to bone or joint infection. Procedures in orthopedics should be simple enough to lend themselves easily to aseptic technic.

Fenestration and hemilaminectomy in the treatment of intervertebral disc protrusion are examples of problems currently being evaluated. These operations are not difficult; however, there are many questions to be answered. The problems will be solved by those who understand both physiology and aseptic surgery.

Dr. Albrecht from Colorado then gave a presentation on the Fromm Distemperoid virus

#### SESSION ON LIVESTOCK

Dr. Banks' presentation on the use of radioactive cobalt was followed by an animated discussion of the hazard to the operator. It was agreed that the risk involved in handling radioactive cobalt was considerable. Dr. Banks thought that at some future date it might be possible to activate the material after it has been implanted, rather than before, which would be much safer.

#### The Use of Radioactive Cobalt in Treating Ocular Carcinoma in Cattle

W. C. BANKS, D.V.M.

Professor of Veterinary Radiology, Texas A & M,
College Station, Texas

This discussion includes a number of color slides.

Ocular carcinoma in cattle is a fairly common condition in the Southwest. The cause has not been established, but it is felt by many that it is probably a combination of factors including considerable exposure to the sun, non-pigmentation around the eyelids, initiating infection or chronic irritation and finally a predisposition toward the malignancy.

The type of cancer usually found on biopsy is a grade I or grade II squamous cell carcinoma. Treatment consists of implanting radioactive cobalt needles into the neoplasm until approximately 8,000 roentgens have been delivered. The results have been good and sterilization of these selected tumors has been obtained in at least 85% of the cases treated. It must be noted that these were selected cases.

#### Barbecue

Eleven busses transported more than 400 doctors, their wives and families to Los Rancheros Visitadores, in the hills above Santa Barbara for El Presidente Barbecue on Tuesday evening.



Above: "She stole the show!" Jean Ellen Jasper, 2½-year-old daughter of Dean and Mrs. Donald E. Jasper, could not refrain from doing a solo at the Barbecue.

Right: Some of the 437 who attended the Barbecue at Los Rancheros Visitadores. Dr. Victor Ward and his capable committee—all attired in colorful Spanish costumes—made this event easily the outstanding highlight of the meeting.

The awarding of golf trophies was followed by the presentation of a gavel from Dr. Scott to the newly-elected president, Dr. Walker. For several hours the crowd of veterinarians and their wives and children was entertained by Spanish singers and dancers.

#### Panel on Client-Veterinarian Relationships

Both Dr. Humphrey and Dr. Ozanian had prepared their talks with special reference to new graduates, and none of them were present. The main point presented was that a practice is built through competence and personality. Price-cutting may give a momentary advantage, but in the long run damages the price-cutter as much as the other veterinarians in the area, if not more. The client prefers to pay more if he feels that he is getting better service.

Since we had the unexpected good fortune of having Dr. Willard Guard of Ohio State with us, he was asked to give a discussion of the problems of racing. He is especially interested in our present racing scandals, as he has been attending meetings of the state racing commissions for years, and is a founder of the National Association of Equine Practitioners. He complained that nobody is now doing research on horses-the horse practitioners are orphans. There is no graduate course for them, only for the trainers. Yet the value of the horses in the country at present is probably about the same as in the old days when there were many more of them, and the veterinary profession was hardly concerned with any other animal.

Dr. Guard feels that the racetrack problem presents an obligation to every member of the profession. We have suffered from isolated acts of a few men who often are not even members of the associations. The Thoroughbred Racing Protective Bureau has policemen following veterinarians around the tracks, as if they were solely responsible for infractions of rules, but pay no attention to the trainers, who are obviously involved in any doping pro-



cedures. To clear up the situation there must be a thorough investigation. We must find out our legal rights, and what is going on, and work it out with the breeders, the breed associations, and the jockey association, all of whom are hurt by the sort of thing that has been going on. We must refuse to have all the blame put on the veterinarian.

#### Wednesday Morning

#### SESSION ON PETS

#### Panel on Canine Skin Diseases

Dr. Mark L. Morris, consultant on skin diseases at Topeka, warned that this panel would not tell us how to do a better job at once. It will require ten to fifteen years to dissect the complex mixture of skin diseases into its component parts.

Dr. Carroll of San Francisco pointed up the frequency of skin disease, the difficulty in diagnosis, and the need for caution in treatment. (His presentation will be found elsewhere in this issue.)

Dr. Stiern of Bakersfield remarked that no two veterinarians concur in treatment, and diagnosis sometimes seems impossible. have to rely on a rather sketchy education and the work of pharmaceutical houses, which is sometimes less than thorough. To improve the situation we must first face the fact that there is much confusion and ignorance, and think collectively. Secondly, we must inform the public on control and prevention. The prevalence of external parasites is a disgrace. We need more pressure from the AVMA, more press and radio releases. We need a central veterinary agency to coordinate matters. We need good research projects. More locally, we need a committee in the state organization to coordinate study and provide speakers for future conferences.

Dr. Yuile, pathologist from UCLA, said that human dermatologists have problems too. The most recent advances in diagnosis have stemmed from laboratory aids. Dermatopathology is unique because the skin is susceptible to such a variety of changes, usually nonspecific. Microscopically, you just see various combinations of these. Very few skin diseases give a specific diagnostic picture.

For diagnosis of conditions which have specific, identifiable causes, we use cultures, smears, special stains of tissue sections, and these are a great help. Viral dermatoses have been diagnosed only in recent years when identification of the virus became possible. Mycology is a big field, and there are some new technics and some good media for growing fungi. Fluorescence is quite a help in some cases, especially in hairy areas. Tissue sections are most important histochemically; there are now special stains for mucopolysaccharides,

which form the fungus capsule. For example, the Schiff (periodic acid) stain makes capsules visible when the fungus could not otherwise be seen. Sensitivity tests are important because so many lesions are related to sensitivity.

Among dermatosis of vague origin we are at present forced to rely pretty much on biopsy. The punch method has stimulated this. The punches are 2 to 6 mm in diameter, so there is little trauma. The best fixative for the samples is 10% formalin. It is best to biopsy some conditions in the early stages, but on the whole the fully developed lesion is best. Just take the worst area and do not try to include normal skin.

Who will do this work in your area? The biopsy technic costs money, and some central area or areas would be better than to try many scattered sites.

Newer knowledge of interpretation of skin samples has come from institutions such as the Army Institute of Pathology, where tremendous amounts of material have been funneled in and studied. There are only two decent books on the subject, one by a clinician of very wide experience. The other is from the Army Institute of Pathology, and is quite the best in the world.

Our aim at present should be pathological and clinical correlation. This requires that a detailed clinical picture and differential diagnosis be sent to the pathologist so that he can really be of help.

Dr. Morris summarized by pointing out our fundamental defects and difficulties: inaccurate diagnosis, over-medication, too much hormone therapy, and loading the animals with antibiotics; the symptoms are very common and alike, and are associated in 90% of dogs and 70% of cats with internal ailments.

He suggested taking Kodachromes and keeping full clinical records from now on, and have discussions of skin disease on every program.

#### Maloccluded Teeth

Dr. Albrecht of Colorado showed slides demonstrating a method of surgically placing maloccluded teeth of dogs in proper position. In most cases the canine teeth were involved, but in one case several incisors were moved as well. The mouth usually appeared normal afterwards.

The next speaker was Dr. Knowles of Miami, who gave his second presentation.

#### Toward Safer Anesthesia

JACK O. KNOWLES, V.M.D. Practitioner, Miami, Florida

Oxygen is used in most advanced veterinary hospitals now, but some of the reasons for its use, we think, are obscure. We will discuss some of the physiology that makes oxygen so



Outgoing president, Dr. A. Mack Scott, Mrs. Scott, Mrs. Walker and new president, Dr. Fred B. Walker, Jr., snapped at the Barbecue.

dramatically effective as a means of therapy and of resuscitation. There are combinations of anesthesias which are most beneficial to each specific requirement. We will discuss these individually, covering such subjects as: what is the safest anesthesia, what is the safest method of prolonging anesthesia for protracted periods, should one anesthetic be used repeatedly to extend the duration of anesthesia in an individual patient?

There are several very simple and effective methods of administering oxygen, both as an emergency measure and as a standard procedure used as part of surgery.

#### SESSION ON LIVESTOCK

Dr. Carricaburu's talk on contagious anemia in cattle will appear in a future issue.

The second speaker at this section was Dr. McCarty of Wyeth, on the popular subject of tranquilizers.

#### Chemical Restraint in Large Animals

R. T. McCARTY, D.V.M.

Department of Veterinary Science, Wyeth Laboratories, Philadelphia, Pa.

The use of ataractics in large-animal practice extends from their ability to control nervousness and agitation to the usage of this group as potentiators of general anesthetics in surgery. By injection they are used as "chemical restraint" mechanisms, rather than physical force. The usage of the drugs in specific operations and surgical procedures will be mentioned. Other actions of the drugs which make many surgical procedures easier are described. The use of specific products in procedures such as standing castration of the horse, circumcision and other operations of the bovine penis, and in dystokias of both species are described. The sites of action and a discussion of several of the compounds will

be presented, along with trade names of the various manufacturers.

The next speaker was Dr. Enge, a newcomer from Minnesota, who is now an Extension Veterinarian with the University of California.

#### Veterinarian's Problems of the Midwestern Feed Lot

P. C. ENGE, D.V.M.

Extension Veterinarian, University of California, Davis

Problems of feed lot cattle in the midwest can be divided into groups depending on size, weight, sex and condition of the animals at arrival.

Steers of top quality weighing from 500 to 750 pounds are of the size from which we can expect very little shipping fever, but do have problems of mucosal disease, coccidiosis, urinary calculi, some foot rot and impactions. Then when steers get up to 950 or 1,000 pounds there is a marked lameness probably due to a vitamin or mineral deficiency caused from an allcorn ration.

The heifers at the same weight and group cause us more trouble, probably as a result of the way they are handled and fed; handling in large feed lots and fed supplementary ration other than that of an all-corn protein hav ration. Heifers are more subject to stress conditions such as sorting, shipping from different sale barns and exposure to more severe weather conditions, which predispose them to diseases such as rhinotracheitis or the muccsal disease complexes, foot rot, scouring and anaplasmosis.

The last group that gives us trouble consists of calves of both sexes that weigh from 250 to 400 pounds. The chief problems seen in this group include shipping-fever problems and all of the closely related diseases. Veterinary in-

come from this group far exceeds that of the other two groups in the midwestern states where we have four distinct seasons of the year.

Proper treatment of the above diseases is based on correct diagnosis, using clinical symptoms and frequently diagnostic aids. The use of indicated diagnostic aids increases the accuracy of diagnosis and enables the veterinarian to keep in step with the progress that is being made in veterinary medicine. The diagnosis, along with the choice of drug and the methods of treatment, determines the morbidity and mortality of diseases in the herd.

The future of the veterinary profession depends upon the veterinarian's technique in performing his diagnostic duties and administering the drug to sick animals. Preventive treatment must not be overlooked but in some instances this is leaving the hands of the veterinary profession. However, it can be retained by proper diagnostic techniques in treatment of sick animals. When the above is performed, the veterinarian has every opportunity to prescribe the preventive treatment for the herd, to supply necessary medical agents, and to keep preventive treatment in the hands of the veterinary profession.

#### Aspects of Brucellosis Control

The scene is shifting, and a new era in brucellosis control is now dawning. Dr. Boyd gave a brief history of control since the first regulations in 1947. The success of the calfhood vaccination program has exceeded our greatest expectations, due to the help of the contract veterinarians. Since the program started in 1948, the incidence has fallen from about 17% to about 3%, saving a great deal of money for the taxpayer. With changing times and conditions we had to call for federal-state area eradication, leading to modified certified accredited areas. The Brucellosis Committee sponsored an enabling bill to permit California to cooperate with the USDA for area eradication. This parallels the old TB legislation, defines, gives procedures, and a small appropriation. It passed both houses unopposed.

Prior to this, a regulation from the Director of Agriculture provided that when a county had 65% of the cattlemen signed, owning at least 50% of the cattle, the area could be declared brucellosis control area. The legal advisors say it is preferable to have the authority in the law rather than in regulations. Certain dairy groups sponsored an indemnity for reactors, which is now on the Governor's desk, providing \$320,000 for the next fiscal year. He thanked the practitioners; there has been practically no adverse comment from the industry, and many compliments.

Dr. Gooding, representing the USDA, said that recently the seventh state was declared a modified brucellosis-free area. Three or four more states are almost ready for classification. Progress has been astonishing since 1954 under the accelerated program. At the last meeting of the U. S. Livestock Sanitary Association most agreed that most states would be accredited by 1960.

Dr. Stuart said that California enters the cradication program in better shape than most states, because of the calfhood vaccination. The Brucellosis Committee has been very wise, especially in requiring test or vaccination before movement of cattle. We will not be left with susceptible animals, and are also protected against entry of infected animals into the state. Calfhood vaccination must be continued, and we must have support both legislative and from the industry.

Dr. King said that there will have to be a compromise between federal and state regulations. We would like the vaccination time lowered to four months, but not below twelve months. Dr. Stuart said the matter of age is a regulation, not law, so it can be changed after a hearing. Dr. Gooding said the animal is officially vaccinated when four through eight months for dairy breeds, and four to twelve months for beef or semi-range stock.

Dr. Chastain reported that immediately after the certification regulations became effective (4 April), five counties submitted petitions to become modified certified areas, Dkorte, Alpine, Inyo, Mono, and Marin. The northern counties were affected by federal regulations regarding movement across state lines, and Marin dairymen were anxious to set aside an area to evaluate the whey test. Since then Modoc and Lassen have petitioned to enter the program, and petitions are circulating now in eight other counties.

On the basis of 160,000 blood tests since 1954, largely involving movement of dairy cattle, there is 2.9% infection. Test of 10,000 cull beef animals (not calves) in slaughterhouses showed an incidence of 2.8%. In the five counties that have petitioned, the incidence is no greater. In Marin it is less than 1% but the number of infected herds is too high for immediate certification. The same is generally true in Alpine and Mono. Del Norte is well prepared, with a percentage near zero; only two reactors so far, two infected herds. It will probably be the first county certified.

It is hoped that results in Marin County will permit acceptance of the whey test by October. It is assumed that the contract veterinarian will do as much of the whey work as they desire. A write-up on new regulations and changes in the regulations, to answer questions of contract veterinarians and those wishing federal appointments has been promised for publication in the California Veterinarians.

#### Some Observations and Experiences in Thailand

DAVID E. MADSEN, D.V.M., M.S., Practitioner, San Jose



Dr. Madsen explains the preparation of Rinderpest vaccine by the use of a Freeze-Dryer machine. Observing are veterinarians from Vietnam, Cambodia, Laos and Thailand.

The International Cooperation Administration, an activity of the U. S. State Department, gives aid to many areas of the world where its technical and economic assistance has been requested. It was my fortune to be assigned to the staff of technicians operating in Thailand (Siam) as one of two veterinarians. Dr. J. W. Williamson, formerly of Houston, was my colleague. He had several aid projects under way when I arrived in Bangkok on September 14, 1954.

The I.C.A. had a staff of approximately 100 American technicians, administrative officers, and clerical personnel, most of whom were stationed in Bangkok. In general, I.C.A. assistance can be divided into the fields of agriculture, public education, public health, and industry. The Livestock Division was one of the components of the agriculture group. We worked in close harmony with the Thailand Livestock Development Department. They told us of their problems, and together we outlined projects designed to solve them. The I.C.A. contribution was two-fold: technical assistance of experts in planning projects, and economic assistance by way of necessary materials to carry forward the projects.

Thailand, now occupied by 20 million people, has never been dominated by a foreign power. About twice the size of Colorado, the area has never experienced a famine. Being only 15 degrees from the equator, the rainfall and temperature favor the production of food with a minimum of effort. Rice, fish, and

tropical fruits are more than adequate for the basic needs. This easy life has for generations developed a carefree, lackadaisical attitude which currently is not compatible with the higher living standards they seek. Stimulated by the current shrinkage of the globe, they have a taste for Western luxuries, but in order to import these items some foreign exchange must be developed. Present efforts are directed toward production of export commodities and finding a market for them. The northeast portion of Thailand is classed as marginal rice land, and offers great promise as a livestock area-cattle, swine, buffalo, and poultry. However, farmers must first learn how to prepare land for pasture, how to build pasture fences, and how to grow and cure forage to tide them over the slack pasture season

With this background, then, I will outline some of the animal husbandry and veterinary activities in which the I.C.A. was interested.

The Thailand government has seven livestock farms. These are stocked with native animals and with a few imported breeds, mostly from the United States. These may be regarded as demonstration farms. Equipment, methods, experiments, and supervision are provided, using as a guide some methods common in America. Results thus far indicate that Brahma cattle imported from Texas and Red Sindhi cattle imported from India are far superior to the native cattle in economy of production and quality of product. They

also appear to be nearly as resistant to the many blood parasites so prevalent in this area. Brown Swiss dairy cattle appeared not to thrive well during the first year's trial. In this connection, the Siamese usually do not like milk, and the small amount consumed is chiefly imported as evaporated canned milk and powdered milk from the low countries of Europe.

Duroc Jersey swine in the first year's trial appeared superior to the Hampshire and Berkshire breeds. Their comparison with native breeds is yet to be determined, but results look promising for the Durocs. The native hogs are of two types, a large swayback with wrinkled skin, which originally came from China, and a small, long-snouted, upstanding type.

In the poultry field, American imports of New Hampshire Reds, Rhode Island Reds, Barred Rocks, and White Leghorns, have all done well when properly housed and fed. As a village scavenger, they have difficulty competing with the native "jungle fowl" type, a highly colored bird with long fighting spurs. There are no sheep and very few goats in Thailand.

Rinderpest has for many years been the scourge of cattle, buffalo, and swine in most of southeast Asia. Immediately after World War II, 10,000 acres of land were withdrawn from cultivation in Thailand because of scarcity of work animals. Within three years, 200,000 cattle and buffaloes and 45,000 swine succumbed. Veterinarians employed by the government eradicated the disease in three and a half years by a program of restricted movement of stock and vaccination.

Some of the earlier types of vaccine used included inactivated tissue vaccine, goat-adapted virus, and lapinized virus. The final vaccine found most economical as well as effective in cattle and buffalo was lapinized ex-pig virus. It was developed in Thailand by the British researcher Hudson. The vaccine produces a high level of immunity for at least three years, but is not applicable for vaccination of swine.

After eradication, Thailand found sporadic outbreaks along the Cambodia and Laos borders, the disease being brought across from infected areas. Therefore, in 1955 the I.C.A. and F.A.O. (United Nations) organized and financed an international attack on rinderpest, with the result that by the end of 1957 rinderpest is expected to be non-existent in Cambodia, Laos, South Vietnam, and Thailand.

It was my privilege to assist Dr. Williamson in some of the preliminary planning. He and Sir Thomas Dalling, F.A.O., deserve much praise for the careful planning and the successful completion of this project. The pro-American, anti-French feelings in Vietnam and the pro-French attitude in Cambodia,

with Thailand definitely pro-American, created a delicate situation which required some skillful maneuvering.

Vaccine production takes place in government laboratories in Pak Chong. Here the I.C.A. has financed production equipment. Hog cholera, rinderpest, Newcastle disease, anthrax, hemorrhagic septicemia, and rabies are some of the vaccines currently produced.

Foot and mouth disease is widely scattered over Thailand, and adjacent countries. It is of low virulence, causes little or no mortality, but results in economic loss by temporarily incapacitating work animals. It also interferes with the normal flow of exports to areas such as Hong Kong and Singapore. The I.C.A., in cooperation with the F.A.O., was in 1955 planning the building and equipping of a laboratory in Thailand for the production of vaccine against foot and mouth disease.

A veterinary diagnostic laboratory was constructed and equipped in Bangkok with I.C.A. assistance. It became my duty to advise and counsel Thailand veterinarians on laboratory diagnostic procedures. One field trip in connection with such diagnosis was made into a semi-jungle area in Northeast Thailand near the Burma border, to investigate losses occurring in a herd of elephants owned by a teak logging company. After hiking in for a day and a half, we build restraining stocks to confine the animals for examination.

On direct examination of the blood of 27 animals, 21 showed microfilaria (*Jour. Parasit.* 42(5):552, Oct. 1956). Warble larvae (*Estridae*), nematodes, and liver flukes are common in Thailand elephants.

Rabies in dogs is common. I have observed lines of children and adults at the Pasteur Institute in Bangkok, awaiting their turn for prophylactic Pasteur treatment. The incidence is related to the stray dog problem. On one occasion I saw a client come into the waiting room of the College veterinary clinic leading a rabid dog on a leash. When health officers attempt to confiscate stray dogs, it is not uncommon for some Buddhist monk or otherwise religious person to give the dog temporary refuge from the law by hiding it. He thereby builds up for himself merits in the Hereafter, thus more nearly approaching the much desired state of Nirvana. method most used for reducing the stray dog population is to periodically place out poisoned food. By placard and newspaper notices, the dog owners are warned of the proposed action so that they may confine their pets.

Brucellosis has existed in government institution swine herds. The source was believed to be importations from Australia. The prevalence of Brucellosis in village-raised oxen, buffalo, and swine, is not known, but preliminary observations indicate it not to be a serious problem. Hog cholera is generally spread throughout the nation, where it is

known as "swine fever." Hemorrhagic septicemia is common among cattle, buffalo, swine and poultry. Dr. Bains, F.A.O., an Australian veterinarian, has conducted field research in Thailand and Burma on this disease. Pullorum disease is quite prevalent in imported breeds of chickens, partly because of the apathy of one institutional officer in charge of poultry breeding. Due to the heroic efforts of Dr. Lancaster, an Englishman with F.A.O., progress has been made in controlling Newcastle disease in chickens.

Only in Bangkok is there anything approaching systematic meat inspection. Because refrigeration of meats is limited or non-existent, the meats consumed one day are slaughtered the previous day. Chunks of meat are displayed in the open markets, hanging from hooks or tied up with reeds. Meat is chopped into chunks with a cleaver, no attention being paid to meat cuts as we know them.

I found the cattle-buffalo municipally operated slaughter unit to be non-mechanized, with sanitation very poor compared to American standards. Two veterinarians were in attendance. Moslem butchers were present to make the kill in the accepted manner for meat to be sold in Moslem shops. Buddhists have no preference in manner of kill, but devout Buddhists refrain from killing anything, although they eat meat with impunity. Killing is neatly circumvented by employing some marginal Buddhist or a non-conforming Chinese to make the kill.

In the swine slaughtering unit, slaughter began at 11:00 p.m. and ended at 2:00 a.m. One thousand swine are slaughtered during this period. Dealers pay the municipality 17 Baht (85 cents) per hog for the slaughter facilities and slaughter license. The work is carried out in about 20 team units, each unit being staffed to carry out the complete procedure of stunning, bleeding, scalding, and eviscerating. No carcass is suspended during

the entire operation. Ingesta are washed from the alimentary tract. The carcass, with all its organs tied on a string, is then carried on a shoulder stick to a large concrete slab covered with a roof, from which point the carcass and viscera are transported to the purchaser in the early morning hours. Because it is entirely a floor operation, and because considerable walking about and expectoration are inevitable, and water pressure is low, it becomes obvious that the sanitation leaves much to be desired. Because I was a special American guest, I was ceremoniously presented with a pan filled to the brim with one of their national delicacies-"pig's penis." The following day, my Siamese cook prepared them for me. Although no doubt she was skilled in her profession, the dish lacked a certain "oomph" as far as I was concerned.

"Inadequate" would be completely overstating the quality of instruction at the veterinary college at Bangkok. Siamese veterinarians engaged in serum and vaccine production, and some of the other division chiefs, received some training in foreign countries. Practically all veterinarians are government employed, no opportunity existing for private practice.

The livestock industry is retarded more by a lack of knowledge of problems connected with animal husbandry, markets, processing, and transportation, than it is by lack of knowledge concerning animal disease. It is presumed that general absence of animal concentration is a deterrent to disease spread. If animal numbers increase, one can expect parasites and infectious disease in this tropical area to increase unless control measures are taken.

There is potential agricultural wealth in Thailand. Its development hinges on education, sound government practices, and the will of the masses to progress. There appears to be some indication of an awakening to these concepts.



Veterinarians in Southeast Asia and Foreign Aid veterinarians plan the attack on Rinderpest.

#### 1

#### Disease Control Committee

Health Certificates-During the last two or three years the State Department of Agriculture has endeavored to improve the accuracy and quality of official health certificates issued by accredited veterinarians for livestock moving into other states and foreign countries. Compliance with federal regulations and the laws and regulations of other states has been stressed. The committee is happy to announce that there has been a 100 per cent improvement in the manner in which official health certificates are prepared. The department's increased efforts in this matter have been in cooperation with other states. It has been generally felt by livestock sanitary officials throughout the country that much improvement was indicated in the manner in which accredited veterinarians issue official health certificates and that this is a direct reflection on the integrity and care veterinarians in general give to their professional activities.

Contract Veterinarians-Calf Vaccinations-There are presently 362 accredited veterinarians under contract with the state to vaccinate calves for brucellosis in accordance with the state law. The committee finds that the cooperation of the contract veterinarians for the last year has been very good. There has been some concern over a decided decrease in the number of dairy calves vaccinated during the first five months of this year as compared to the same period for last year. There is some indication this could be due to less dairy calves being raised. However, the committee wishes to caution accredited veterinarians that it is highly important that they keep their calf vaccinations up-to-date. The efficiency in the manner in which this service is rendered could have an effect on the practicing veterinarians' participation in an expanded brucellosis eradication program which appears to be just around the corner.

Brucellosis Eradication Program — Every effort is being made by state officials in cooperation with federal officials to have accredited practicing veterinarians participate in brucellosis area certification work. California is on the threshold of a final drive to stamp out brucellosis, the incidence of which has now been reduced to approximately 3 per cent by calfhood vaccination.

Brucellosis Committee — State and federal officials have enjoyed participation in the meetings of the contract veterinarians com-

mittee and they report that the work of this committee under the leadership of Dr. John King has been very constructive. Your committee urges that the association give every support to the contract veterinarians committee. This committee accomplishes invaluable liaison between the federal and state regulatory officials and the practicing veterinarians. It can be a very important committee in any future expanded brucellosis control project.

Reportable Diseases—The committee regrets to report that while there has been some improvement on the part of practicing veterinarians in the matter of reporting reportable diseases, in general it appears that they are "dragging their feet" in this regard. In addition to being required by state law, it is felt that the reporting of livestock diseases is a service from which all veterinarians will receive mutual benefit and one which they owe to the livestock industry and to their country as a whole.

Respectfully Submitted:

J. E. STUART, Chairman E. E. JONES

#### **Ethics Committee**

This committee wishes to acknowledge receipt of a report from the chairman of the Committee on Ethics, SCVMA, June, 1956, which has been noted and filed. This was a report of a local action concerning the disciplining of one of its members and needs no action by this committee; it was received too late for the June, 1956, report at Los Angeles.

All cases cited to this committee this past year have been resolved, with the exception of one which is pending that will have to be brought to conclusion by a future appointed committee.

Respectfully Submitted:

CHARLES H. REID, Chairman HERBERT I. OTT RICHARD S. TANGEMAN

#### Ways and Means Committee

Chairman William J. Zontine discussed changes in the Constitution and By-Laws of the Association, which were printed in the May-June issue of The California Veterinarian. The new Ways and Means Committee will consider amendments proposed by the members to be presented in January.

#### Membership Committee

Active members in the Association at the beginning of the year numbered 1034. Six members died, 45 members were dropped for non-payment of dues, 11 members resigned, 106 new members joined, making a total of 1078 at the end of the year.

Forty-five of the new members were seniors who graduated from Davis in June. These were signed after Secretary Travers addressed the group in May.

The Membership Committee worked hard on delinquent members during the year. Your chairman prepared a special letter to delinquent members and succeeded in getting some results.

Respectfully Submitted:

CHARLES H. OZANIAN, Chairman NORMAN N. JEROME B. V. LUNDBERG NELSON D. CRANDALL V. H. AUSTIN ERNEST MAKINO WM. E. STEINMETZ JOHN B. SHIRLEY MYRON H. SCHAFFER DAVID H. WIXOM

#### Resolutions Committee

During this year our Association has lost by death the following members:

Dr. W. C. Bateman ... San Bernardino Dr. Mitchell Joseph Smith ... San Diego

Dr. Theodore Joseph Niemeyer ..... Santa Monica

Dr. Roy A. Groshong Selma
Dr. J. J. Street Ventura
Dr. Floyd P. Wilcox Los Angeles
Dr. J. W. Childs Browns Valley

These men have been a credit to our profession and to the community in which they have lived and practiced.

Letters of condolence have been sent to their families and a copy mailed to the Secretary of our Association.

Respectfully Submitted:

ROBERT A. BALL, Chairman

#### **Program Committee**

The report of the Program Committee, made by Dr. Richard L. Stowe, chairman, was brief. The committee, composed of Drs. Ernest H. Houchin, J. Bradley Crundwell, Robert B. Frater and John F. Christensen, presented an excellent group of speakers, ten of whom were from out-of-state. This Committee inaugurated closed circuit TV at the last Midwinter Conference.

#### Dr. Simms Goes to Turkey

Dr. B. T. Simms, ARS, retired from the United States Department of Agriculture on June 30. He has accepted a position with the University of Nebraska for assignment to the University of Ankara.

He will teach and engage in research at the Ankara Veterinary College. Dr. Simms



DR. B. T. SIMMS

will be remembered as one of the outstanding speakers at the CSVMA annual meeting in San Diego, in 1954.

#### Old Youngsters Gather

The third annual reunion of the graduates of the San Francisco Veterinary College was held during the CSVMA convention at a luncheon in the Montecito Room of the Miramar Hotel in Santa Barbara, June 17.

Ten were in attendance and two others arrived late but were able to see their fellow schoolmates. Those present were:

'15
'18
'16
'15
'16
'06
'10
'12
'16
'16
'16
15

The youngest man present was 62 and the oldest 81. The average age was 69.

Dr. Duckworth was re-elected president, and Dr. Arburua was re-elected secretary.

The next such reunion will be held in San Jose in June, 1958, during the annual meeting of our State Association.

#### Pensions for Veterinarians

Reminder—Self-employed professionals can get a pension now under law enacted last year, if they have reached retirement age of 65 (men), or 62 (women), and if they have had the necessary six quarters of coverage. Applies to lawyers, optometrists, veterinarians, chiropractors and others. Husband and wife may each get pension. Apply at your local Social Security Office.

#### Management of Skin Diseases in Dogs\*

HOWARD F. CARROLL, D.V.M., Practitioner, San Francisco

There is throughout the veterinary profession a need for a practical guide or text on dermatology pertaining to the small animal. Few of us stop to realize that skin conditions cause more illness than disease of any other organ. Almost one in every five patients that come to my hospital comes because of a skin ailment.

Rare indeed is a veterinarian whose schooling has qualified him to recognize, let alone treat, this large segment of our practice.

To diagnose these cases we need to get an accurate history, including age, sex, breed, past treatments, any surgery that has been performed, duration of the condition, diet, etc. We have to study the extent, characteristics, and general distribution of lesions. We can't rely too much on clinical observations alone—not only can morphologically identical lesions be produced by different etiologic agents, but one etiologic factor can lead to a great variety of morphologically different cutaneous lesions.

Cultures, skin scrapings, blood counts, urine examinations of all kinds, fecal examinations, examination of foci of infection, and all other diagnostic procedures may be indicated in specific cases.

I believe it is important to make a diagnosis as early as possible. Recognize whether dermatosis is acute or chronic, dry or exudative, papular or vesicular, infected or not infected, superficial or deep, spreading or remaining fixed. The topical agent should then be chosen to produce specific effects according to the characteristics of the lesions (as soothing, protective, drying, penetrating). I believe a practitioner should have a few, say about eight, standard external medicaments. Some wet dressings, some shake lotions, and a few ointments. Master these, and you will have greater prospects of success and a far greater chance of avoiding costly mistakes, than if you attempt to use 80 different remedies without complete knowledge of their properties, incompatibilities, and contraindications.

Bear in mind the possibility that a remedy may harm rather than help. When in doubt use the mildest medicine. Use new medications with caution and on small areas.

I believe in frequent observation of the effects of the medicine, to adjust and modify the treatment. When a medicine is working do not change, but when a remedy disagrees, stop it.

Remember that the skin is an integral part of the body, in close reciprocal relationship with the other organs. With this in mind the veterinarian will recognize the importance of discovering the relationship of cutaneous man-

\*From a Panel Discussion at the CSVMA Convention, Santa Barbara, June 17-19, 1957.

ifestations to the general disease processes. Thus, jaundice, although a disturbance of biliary circulation, or due to destruction of red blood cells. Itching may be a symptom of such diversified disorders as diabetes, uremia, thyrotoxicosis, leukemia, or other metabolic disorders, nerve lesions, and psychic influences. This is to illustrate the general rule that when treating skin diseases a veterinarian must study them with all the diagnostic measures available. For the management of certain skin affections may consist altogether, or in large measure, of treatment of the underlying condition of some organ or system.

It would be a mistake to perform extensive medical studies on all skin cases; but it is never amiss to consider the patient as a whole, to discover and correct other malfunctions, even when the sole complaint is a skin lesion.

#### Morris Foundation Award to Dr. J. V. Lacroix

Dr. J. V. LaCroix, Evanston, Illinois, was recently presented the Mark L. Morris Animal Foundation small animal award for his professional work in behalf of dogs and cats.

Dr. Lacroix, who became a veterinarian in 1906, was recipient of the award at the annual meeting of the American Animal Hospital Association, in San Francisco.

The award includes a plaque honoring Dr. Lacroix for his work as a practitioner, teacher, lecturer and journalist, and an honorarium of \$500.

In 1919 Dr. Lacroix founded a professional veterinary journal, the *North American Veterinarian*, which became one of the profession's foremost publications.

Besides being one of the founders of the AAHA 24 years ago, he has served as president of that organization, president of the Illinois State Veterinary Association, president of the Chicago Veterinary Association, and as treasurer of the AVMA.

#### Statewide Bang's Disease Committee

On May 8 the Statewide Bang's Disease Committee met in Sacramento. Thirty-eight attended the meeting.

Following Dr. H. G. Wixom's progress report for the department he announced that Marin County had been selected as the area for the pilot control program and that the necessary petitions had been secured. The objective will be to determine if the whey test will free herds from brucellosis.

A brief explanation of the bills on brucellosis before the Legislature was given by Mr. Russell D. Richards.

Push button control of fleas, lice and ticks

### NEW NORSECT

BOMB For Cats and Dogs



Thorough penetration of hair coat PLUS effective insecticidal action at the push of a button distinguish NORSECT aerosol type spray. NORSECT contains pyrethrins and piperonyl butoxide, for synergistic "quick knock down — killing" action, methoxychlor, powerful residual insectcide; and butoxypolypropylene glycol, effective repellant. Pleasant scent makes NORSECT a welcome insecticide in the clinic and at home.

Stimulate repeat dispensing sales with NORSECT bombs.

12 oz. bomb; 12-12 oz.

NORDEN LABORATORIES



Norden Sacramento Agency Sacramento, Ph. GI 1-3826 California Veterinary Supply Hollywood, Ph. HO 3-3751 Valley Veterinary Supply N. Hollywood, Ph. PO 1-7565

# SYNOVEX from SQUIBB

higher weight gains at lower cost per lb. of gain and . . .

Synovex has been cooperatively developed by E. R. Squibb and Sons and Syntex. SYNOVEX is a registered Squibb trademark.

SQUIBB QUALITY



TEST AFTER TEST, FEEDLOT AFTER FEEDLOT, performance figures tell the same story: steers implanted with Synovex return a higher profit to the feeder.

Synovex contains two naturally occurring hormones, Progesterone and Estradiol Benzoate. Affecting the body's cells at the enzymatic level, these highly potent hormones induce a marked physiological response. Feed conversion is improved as much as 20%, with savings of up to 5c per lb. of gain.

- SYNOVEX has improved rate of gain up to 50% over Stilbestrol.
- SYNOVEX implanted steers grade out fully as well as non-implanted with noticeably better bloom after 60 days. Carcass shrink is normal, flesh well marbled with slightly higher proportion of lean and less separable fat.\*
- SYNOVEX makes unnecessary the storage and handling of special feeds with hormone products added.
- SYNOVEX goes to work in minutes and one implant lasts a full 150 days. Synovex is recommended for steers weighing from 400 to 1000 lbs.

**NEW!** "SYNOVEX SYNOPSIS" containing recent test results, performance data, etc., for Synovex vs. Stilbestrol and controls. Get all the facts. Write Squibb for your free copy.

SYNOVEX IS AVAILABLE FROM YOUR SQUIBB BRANCH OR Your wholesaler in 10-implant and 100-implant Packages for your use and dispensing.

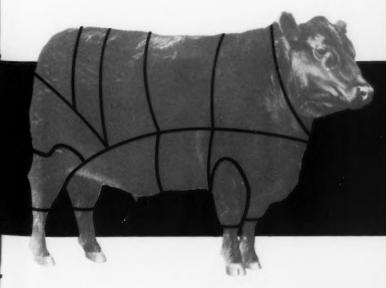
SQUIBB, Veterinary Products Department, 745 Fifth Avenue, New York 22, N. Y. Insert plastic cartridge containing six pellets of Synovex into the shank of the implanter.

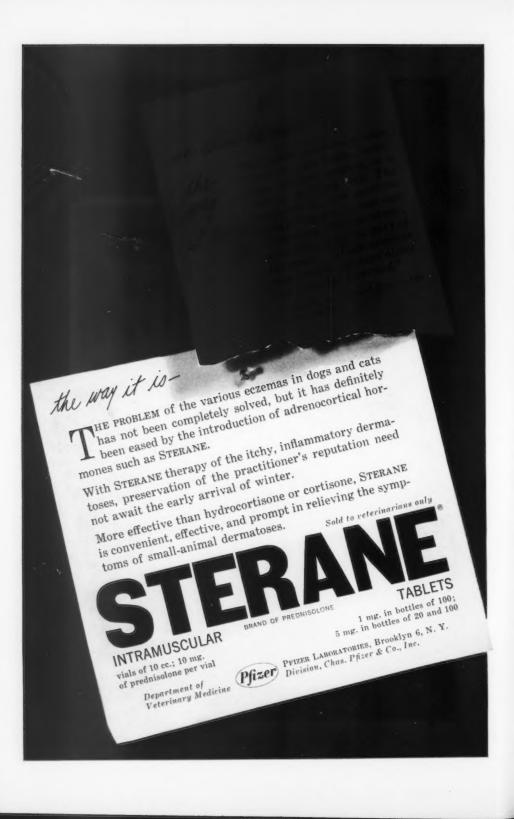




Nick through skin of ear with special scalpel, insert tip of implanter, press plunger to eject all 6 pellets of Synovex.

eR. J. Deans, W. J. Van Aradell, E. P. Reineke and L. J. Bratisler (Michigan Agricultural Experiment Station): The Effect of Progesterone-Estradiol Implants and Stitchestrol Feeding on Feed Lot Performance and Carcass Characteristics of Steers, Journ. Animal Sci. 18:1020, 1956.





#### Women's Auxiliary Convention Report

The 69th Annual Convention of the California State Veterinary Medical Association was held June 16 through 19, at the Miramar Hotel in Santa Barbara. Since Santa Barbara has long been known for its annual Spanish fiesta, it was decided by the local committee to carry out a Spanish theme. This theme was followed throughout the convention, even to the committee dressing in Spanish costumes. Dr. and Mrs. Victor Ward were the general chairmen for the convention, and the success of the convention was largely due to their efforts.

To start off the festivities, the Santa Barbara and Ventura County veterinarians and their wives hosted a cocktail party Sunday night in the convention hall. Around 150 attended, and everyone seemed to enjoy the delicious hors d'oeuvres and cocktails served them, as well as renewing old friendships, and making new ones.

Monday morning the golf enthusiasts took off early for the Montecito Country Club for a golf tournament. Mrs. John G. Bee, of Ojai, was in charge of the women, and Dr. Joe Ridgway, of Ventura, for the men. Dr. Ridgway was also responsible for obtaining the trophies which were awarded the winners.

For those who didn't play golf, there was a bus trip arranged by Mrs. T. F. Taylor, of Santa Barbara. The tour included the historic Santa Barbara Mission, which is always enjoyed by all those who visit the city. After winding around the hills, where a lovely view of the picturesque harbor could be clearly seen, the bus stopped for a tour of the courthouse. Since Santa Barbara is primarily built of Spanish architecture, it naturally follows that their civic buildings are of the Spanish type. The courthouse is truly an edifice of beauty, and anyone who didn't avail herself of the opportunity to go through it missed a lot.

A business meeting was held Monday afternoon, followed by a tea. This was done in order that the business of the Auxiliary could be taken care of at that time, thus leaving the luncheon for a purely social time. The president, Mrs. R. E. Duckworth, presided, and the following officers were elected to serve for the year 1957-1958:

President, Mrs. Charles Ozanian, Bellflower. President Elect, Mrs. Reginald Stocking, Los Angeles.

First Vice-President, Mrs. E. H. Houchin, Ventura.

Second Vice-President, Mrs. Louis F. Johnson, Sacramento.

Secretary-Treasurer, Mrs. B. S. Burdo, Sebastopol.

Membership Chairman, Mrs. Russell Cope, Richmond.

Mrs. Duckworth also appointed Mrs. F. B. Walker, Jr., of Escondido as liaison officer; Mrs. W. A. Young of Los Angeles as parliamentarian. The Nominating Committee appointed by the president consisted of Mrs. E. V. Bacon, Los Angeles; Mrs. E. R. Braun, Hanford, and Mrs. Wm. F. Steinmetz, of Sacramento.

It was voted to reduce the interest of student loans from 5 per cent to 2 per cent.

An amendment to the Constitution was made, whereby any woman interested in the Auxiliary could become an associate member whether her husband is a member of the Association or not. She may attend meetings and work on committees, but cannot hold office or vote.

It was reported that two new chapters had been formed, one in San Fernando, and one in southeast Los Angeles.

A motion was passed to raise the annual and semi-annual registration fee from \$3.50 to \$5.00.

The highlight of the women's activities was the luncheon on Tuesday at the Biltmore Coral Casino, and attended by 100 women. The tables were centered with flowers, and each place was marked with a miniature sombrero as a souvenir. Mrs. Joe Ridgway, who was chairman, and ably assisted by Mrs. E. N. Harder, Mrs. F. Knoop and Mrs. C. H. Colton, had obtained a Charles Antell lipstick for each lady, and this also was at each plate.

The head table had large arrangements of flowers in addition to the decor used on the small tables. Tiny sombreros were fastened to the front of the tablecloth which hung to the floor. Live shrubs behind the head table were hung with both large and small Mexican hats.

The stairway leading from the dining room to the balcony was blocked off with a huge poster depicting a toreador in all his splendor. Palm fronds were laid on the stairs and these were topped with bright paper sunbursts of many hues. The railing was hung with bright colored ribbon rosettes and streamers.

As the guests arrived, they were greeted by the local committee in Spanish costumes and each carried a basket of hibiscus blossoms which they gave to the ladies to wear as a corsage. The program, in keeping with the theme, was Spanish music and dancing. The mistress of ceremony was an entertainer from the Restaurante El Paseo, and she added a great deal to the program with her lovely rich voice and vivacious personality. The dancing by a talented group of dancers was both gay and colorful.

(Continued on page 35)

#### **Public Relations Scripts**

KENNETH G. McKAY, D.V.M., Extension Veterinarian, U of C, Davis

Following is a list of the public relations tape recordings prepared by Dr. Kenneth G. McKay for the Veterinary School at Davis, and made available to the Secretary of the California State Veterinary Medical Association (see report of the June Meeting).

#### Brucellosis

1. Progress on Brucellosis Control and Eradication in the U. S., Dr. C. L. Gooding, Veterinarian-in-Charge (California), Animal Disease Eradication Branch, ARS-USDA.

2. Status of Brucellosis Control in California Today, Dr. E. F. Chastain, Assistant Chief of the Bureau of Livestock Disease Control, State

Department of Agriculture.

3. New Developments Resulting from Brucellosis Research, and why the whey test is more desirable than the blood test in California, Dr. Hugh Cameron, School of Veterinary Medicine, Davis.

#### Mastitis

1. The Mastitis Complex and the Place for the California Mastitis Test in a Mastitis Control Program, Dr. O. W. Schalm, Associate Dean, School of Veterinary Medicine, Davis.

2. How Can the "Guess Work" Be Eliminated so Mastitis Treatments Are More Effective? How you would recommend setting up a mastitis treatment program, Dr. A. Clark Pier, School of Veterinary Medicine, Davis.

3. Traumatic Injuries Caused by the Misuse of Milking Machines, Mr. Dan Noorlander, Specialist, School of Veterinary Medicine,

Davis.

#### **Parasites**

- Round Worms in Beef Cattle, Dr. James R. Douglas, School of Veterinary Medicine, Davis.
- 2. What Effect Does Particle Size Have on the Efficiency of Phenothiazine?, Dr. Norman F. Baker, School of Veterinary Medicine, Davis.
- 3. Liver Flukes in Cattle and Sheep, Dr. Paul H. Allen, USDA Cooperative Agent in Parisitology, School of Veterinary Medicine, Davis
- 4. Description the Life Cycle of the Liver Fluke, Mrs. Iola Barber, Parasitologist, University of California, Berkeley.

#### General

 About What Per Cent of the Parentage Problem Can Be Solved by Blood Grouping?, Dr. Clyde Stormont, School of Veterinary Medicine, Davis.

2. The Place of Antibiotics in Animal Health, Dr. S. A. Peoples, School of Veterinary

Medicine, Davis.

- 3. The Most Common Metallic Poisons of Livestock, Dr. Louis Holm, School of Veterinary Medicine, Davis.
  - 4. Chewing Disease of Horses, Dr. Donald

R. Cordy, School of Veterinary Medicine, Davis.

5. Sporadic Bovine Encephalomyelitis, Dr. Walter W. Sadler, School of Veterinary Medi-

cine, Davis.

What Is Infectious Bovine Rhinotracheitis?, Dr. John W. Kendrick and Dr. Delbert G. McKercher, School of Veterinary Medicine, Davis.

7. Blue Tongue, Dr. Delbert G. McKercher, School of Veterinary Medicine, Davis.

8. Epizootic Abortion in Cattle, Dr. J. A. Howarth, School of Veterinary Medicine, Davis.

9. Liver Function, Dr. C. E. Cornelius, School of Veterinary Medicine, Davis.

10. Food Utilization and Milk Formation in Dairy Cows. How will research work with radioactive isotopes help the farmer, agriculture, and industry?, Dr. Arthur L. Black, School of Veterinary Medicine, Davis.

11. Atomic Energy Commission Projects. One of the two projects on the Davis campus will be briefly discussed, Dr. Allan Andersen, School of Veterinary Medicine, Davis.

12. The Use of Antibiotics in Sheep Feeding, Dr. Blaine McGowan, School of Veterinary

Medicine, Davis.

13. Discussion of the Disease Called "Listeriosis," Dr. John W. Osebold, School of Veterinary Medicine, Davis.

14. A Résumé of Activities in the Small-Animal Clinic of the School of Veterinary Medicine, Dr. Gherry Pettit, School of Veterinary Medicine, Davis.

#### Yet to Be Recorded

Bovine Dwarfism, Causes and Characteristics, Dr. L. M. Julian and Dr. W. S. Tyler, School of Veterinary Medicine, Davis.

#### Interviewed by Dr. Rosenwald

 PPLO in Chickens and Turkeys, Dr. Henry E. Adler, School of Veterinary Medicine, Davis.

2. Problems in Poultry Disease, Diagnosis and Vaccines, Dr. Julius Fabricant, School of Veterinary Medicine, Davis (on leave from Cornell University).

#### **OPPORTUNITIES**

#### Veterinarian Wanted

Group mixed practice. Lucrative salary and bonus depending on ability and experience. Inquiries confidential. Address: 10326 E. Artesia Blvd., Bellflower, Calif.

#### \* \* \* For Sale

One metal detector sold by Jen-Sal Co. One year old; never used. Dr. R. E. Hoadley, Box 246, Indio.

### Laboratory Notes

From the Department of Clinical Pathology, School of Veterinary Medicine, University of California

### Collection and Handling of Samples for Blood Chemistry

To avoid changes in composition, it is necessary to observe certain precautions in the handling of blood specimens prior to analysis. The most accurate chemical analysis of a blood specimen that is handled improperly has no clinical value whatsoever. Hemolysis interferes colorimetrically with many tests and can be avoided by the use of a dry syringe, removing the needle from the syringe and expressing the blood gently against the side of the collecting tube. Since the erythrocyte contains considerable phosphorus, hemolyzed serum will exhibit abnormally elevated serum phosphorus levels without greatly affecting the serum calcium determination. True blood values for carbon dioxide content, chloride or sodium can be obtained only by drawing blood without stasis. To prevent the loss of CO2, mineral oil is used in the syringe and the blood transferred to a tube while immersing the needle tions, five mgm. of sodium floride should be added to the blood sample to prevent losses by glycolysis to pyruvic acid. It has been estimated that near 25 mgms. of glucose per 100 ml. of blood may be lost per hour in a warm environment. In collecting blood for protein-bound iodine determinations, the syringe and blood receptacle should both be rinsed in standard dichromate-sulfuric acid cleaning solution followed by doubly-distilled water to prevent any traces of iodine contamination. All samples should be refrigerated immediately upon collection and presented to the laboratory at the earliest convenience. When a delay is imperative, the serum or plasma should be separated from the cells and refrigerated until used. Samples of coagulated blood yield a minimum of 30 per cent serum for chemical determinations. Vitamin A, CO., combining power, and serum transaminase samples should reach the laboratory for analysis as rapidly as possible and never after 12 hours post bleeding. Since all blood constituents are in a dynamic

tip under a layer of oil. In glucose determina-

Since all blood constituents are in a dynamic equilibrium with a multitude of cellular and extracellular compartments, interpretation of results must be viewed only as the existing state at the time of sampling in an ever changing environment. For example, elevations in blood urea from renal tubular back diffusion in dehydration can be rapidly decreased by the ingestion of ample water to produce urea excretion in a transient polyuria.

C. E. CORNELIUS

### Women's Auxiliary Report

(Continued from page 33)

Mrs. A. E. White and Mrs. Victor Ward were responsible for buying the door prizes and are to be commended on their choice.

Dr. Willard F. Guard, of the Department of Large Animal Surgery at Ohio State, gave a brief but impressive ceremony following the luncheon.

The grand finale was the El Presidente Barbecue held high above Santa Barbara in the mountains. The site was the Rancheros Visitadores grounds which are well known all over California. This is the place where the Rancheros stop and feast and rest themselves on their annual horseback trek. are especially indebted to Dr. Victor Ward, as it was through his influence that we were granted permission to use the grounds, as they are not open for public use. A delicious steak barbecue was served to 437 guests by a very efficient barbecue crew. The dinner was followed by the awarding of the golf trophies and a program of Spanish music and dancing. Mrs. Victor Ward worked hard to make the women's activities a success and, from all indications, she succeeded.

It is with a great deal of sadness that we mourn the passing of Mrs. Gaylord Cooke, of Berkeley. She had been an ardent and faithful member for many years and her presence will be greatly missed.

Mrs. E. H. Houchin Publicity Chairman

### Specimen Size and Type for Blood Chemistry

Determ	nination	Specimen	Quantity
Serum Serum Serum Serum Serum	Acid Phosphatase. Alkaline Phosphatase. Amylose Bromsulphalein Calcium CO: Combining Power. Chloride Chalesterol	Coagulated blood Coagulated blood Coagulated blood Coagulated blood Coagulated blood Coagulated blood Coagulated blood	5 5 5 5 7 7 6 6
Serum	Magnesium Phosphorus Potassium Protein-bound lodine	Coagulated blood Coagulated blood Coagulated blood Coagulated blood Coagulated blood Coagulated blood	5 4 6
Serum Serum Serum Blood Blood Blood Blood Blood Blood Cerebi Cerebi	SGPT)  Yan dan Bergh (Bilirubin) Leptospira agglut, test. Brucella agglut, test. Glucose Creatinine Methemoglobin Non-protein Nitrogen. Prothrombin Time. Urea Uric Acid. rospinal Fluid (Phoride).	Coagulated blood Coagulated blood Lithium oxolated	blood 3 blood 5 blood 4 blood 5 blood 4 blood 4 blood 4

### The Nutritive Value of Canned Pet Foods

CHARLES F. WILLIAMS

Vice-President, Calo Dog Food Company, Inc.

All of our four-legged friends that live in California should indeed consider themselves fortunate. For in this state, the canning and preparation of pet foods is under the direct supervision of the California State Board of Health. Cleanliness and wholesomeness of the products used as well as the sanitary canning practices that must be observed are just as strictly adhered to as though the products were for human consumption.

Occasionally we hear of the necessity of supplementing the dogs' and cats' food requirements over and above that provided by our canned products. Observations of many years standing lead us to believe that this is more guess work than fact.

Our formula is clearly stated on the label as is required by the California State Board of Health. It is as follows:

- 1. Meat: CALO's extremely high percentage of fresh meat and meat by-products blended with fresh horse meat is the best source of vital amino acids (protein) the building blocks of the body. CALO also contains ground fresh bone supplying essential calcium and phosphorous so necessary for sound teeth and strong bone structure. It also contains the proper balance of fat (not too much) to improve digestion and as a source of quick energy.
- 2. Cracked Barley and Wheat: To furnish the necessary carbohydrates for body heat and energy. CALO adds selected quality cracked barley and wheat.
- 3. SOYABEAN OIL MEAL: Strong muscles, sinews and tissues are built from its high protein content.
- 4. Carrots: Furnishing carotene for aiding vision, carrots provide the vegetable in the diet.
- 5. Wheat Germ: CALO's high quality wheat germ furnishes the vitamins of the B group that are so beneficial to dogs. This builds re-
- sistance to disease and reduces nervousness.

  6. Salt: One of the vital chemicals is salt
- which is added in just the right proportions.
  7. WATER: To cook the cereals, the proper amount of water is added.
- 8. VITAMIN OILS: Based on the recommendations of the recognized authorities in animal nutrition, each can of CALO has been enriched with expensive fish liver oils, fortified with more than twice the minimum daily requirements of important vitamins A and D. These vitamins are vital for every phase of your pet's development, i.e., his proper growth, maintenance, lactation and reproduction. They enhance his general well-being and make for a glossy, healthy coat and skin.

We are proud to claim many good friends in the California State Veterinary Association as well as the Southern California Veterinary Medical Association. From these gentlemen we have received on many occasions high recommendations for our products.

I fully recognize that I am not a dietitian nor have I been trained in the medical arts. However, I have a keen interest in dogs and own and feed three of these wonderful companions. They are all approximately ten years of age and have been fed practically an exclusive diet of CALO dog food. They continue to be wonderfully healthy and active animals. They mean a great deal to me and I am happy to have played a part in providing them with the food which I think has contributed to their long healthy lives.

It is interesting to note that CALO has been packing pet foods continuously since 1923. The founder of our company was a great lover of dogs. Through experimentation he prepared a formula that was entirely satisfactory to his own kennels and that is what prompted him to prepare this formula in commercial quantities and offer it for sale publicly.

We have tried to carry along in his tradition. Canning a good pet food is more than simply making a profit. My associates and I have a great love for the work we are doing.

### Our 1957 Graduates

DONALD E. JASPER, D.V.M., Ph.D.

Dean, School of Veterinary Medicine, University of California, Davis

The class of 1957 graduated 44 members on May 31, although 52 were originally accepted, a number were drafted early and two were held back for other reasons. The class profile shows an average age of 27.8 and 7.6 years of college. Veterans numbered 19 and 34 were married.

Perhaps the most distinguishing feature is the presence of two very lovely young ladies among the D.V.M.s. Their scholastic and social achievements on campus were widely recognized.

Future plans called for 34 to work for another practitioner and five to start a practice of their own. Large animal or mixed practice appealed to 20, small animal practice to 18. Two were to enter federal service, one was to work for a commercial laboratory and three were as yet undecided.

All but three were Californians originally and only two planned to leave California for purposes of practice.

### Secretary Travers Honored by Exhibitors



Sincere thanks from Charles S. Travers, executive secretary, go to this group of exhibitors who presented him with testimonial and Hamilton wrist watch at the Exhibitors' Luncheon.

Thirty-eight exhibitors displayed their products at the 69th Annual Meeting at Santa Barbara—the largest ever to show.

The Exhibitors' Luncheon, held on Wednesday, June 19, was attended by 64 persons, exceeding attendance at the Statler Hotel last year.

A surprise testimonial was given to Mr. Charles S. Travers, Executive Secretary. Mr. DeWitt Wilson of Winthrop Laboratories spearheaded a movement to honor Mr. Travers. All the exhibitors signed a testimonial statement, which is reproduced below. In addition, the exhibitors presented Mr. Travers with a beautiful Hamilton wrist watch.

"A Testimonial to Charles S. Travers, Executive Secretary, California State Veterinary Medical Association.

"We, the Exhibitors at the 69th Annual Convention of the California State Veterinary Medical Association, convened at the Miramar Hotel, Santa Barbara, June 17-19, 1957, take this opportunity to express our sincere appreciation to Mr. Charles S. Travers for his untiring efforts on our behalf.

"Many of us have exhibited at this Annual Convention for a number of years, and during that time we have enjoyed the friendship of Mr. Travers. Both he and his staff have cooperated with us in every way.

"One of the remembrances of these meetings is the 'Exhibitors' Luncheon' arranged by Mr. Travers. This informal gettogether has always been a pleasant occasion, and one punctuated by the graciousness of Mr. Travers, our host."

The signatures of all exhibitors followed. Those attending the luncheon were:

Jim Howard, John Leamy, H. C. Burns Co.; Del

Murray, Eirl Mundt, Schering Corp.; F. J. Osborn, Chas. P. Denevel, Eaton Laboratories; Bill Sanden, Tom Scott, Elmer K. Deibert, Armour & Co.; Bill Wittern, C. Transue, Diamond Laboratories; H. G. Kaggerud, Coast Vet. Corp.; Dean Jensen, G. M. Slade, George H. Geller, Warner-Chilcott.

Hal Ragsdale, R. P. Johnston, E. R. Squibb & Sons; Don W. Scott, H. J. Hermsen, Warren-Teed Products Co.; Jim Sommers, Fibreplex Kennels; Don Nichols, H. J. Gilbride, H. E. Necker, California Medical Supply; Phil Darby, Larry Schuck, Parke-Davis Company; Jack Kostick, Standard Surgical Co.

Len Sentner, Jack McKenzie, Cutter Laboratories; A. E. Freeman, W. S. Weinrichter, Upjohn; Bob Walker, Norden Laboratories; J. Griner, West Coast Laminating; Don H. Korn, Ray Vejar, Sharpe & Vejar; Wm. B. Nowlin, Fromm Laboratories, Inc.; James K. Banes, Banes Laboratory; DeWitt Wilson, Winthrop Laboratories; S. Meisenheimer, J. Rutledge, L. E. Behrends, Pitman-Moore Company; Verne H. Jewett, Roy White, J. N. Tolle, R. V. Hill, Fort Dodge Laboratories, Inc.

D. S. Kirschner, Kirschner Mfg. Co.; Larry Davis, Encyclopedia Britannica; W. E. Orr, W. C. Brown, Jen-Sal; F. O. Edwards, U. S. Vitamin Corp.; E. N. Smith, Leonard Lewis, Pfizer Laboratories; J. R. Schoenwetter, Guy Buller, Stanton Scientific Equipment Co.; Ken Martin, Hill Packing; Don Rau, Paul Shoemaker, Kal-Kan Foods, Inc.; Dean DeGroff, Valley Vet. Supply.

Arnold Lowman, Westwood Laboratories; Donald Travers, Board of Education, S. F.; Joseph M. Arburua, F. B. Walker, Jr., Russell P. Cope, Charles S. Travers and Herb Warren, CSVMA.

### Col. Foster Leaves for Europe

Col. Robert J. Foster and Mrs. Foster left San Francisco July 26 for an extended European trip.

The Colonel plans a safari in Africa. Mrs. Foster will remain in Nairobi while Col. Foster hunts big game.

The Fosters plan to return to San Francisco sometime in November.

### **OUT-OF-STATE NEWS**

The Washington State Veterinary Medical Association will hold its 42nd annual convention at the Monticello Hotel, Longview, Washington, September 9th and 10th. Dr. William F. Harris, of Puyallup, Washington, is secretary.

### Marmon Named Prexy of Corn States Laboratories

Joseph E. Marmon has been elected president of Corn States Laboratories, Inc., Omaha, Nebraska, by the company board of directors. Corn States Laboratories is a wholly owned subsidiary of Eli Lilly and Company, Indianapolis.

Forrest Teel, executive vice-president of Eli Lilly and Company, made the announcement following the annual meeting of stockholders of Corn States Laboratories. He said that Marmon replaces Guy H. Williams, who has retired.

### In Memoriam

### MRS. GLADYS R. COOKE

Funeral services were held on July 3 for Mrs. Gladys R. Cooke, wife of Dr. Gaylord K. Cooke, prominent CSVMA member and secretary, Board of Examiners in Veterinary Medicine.

Mrs. Cooke passed away in a Berkeley hospital on July 1. A native of Santa Clara, Mrs. Cooke was a charter member of the Berkeley Women's City Club, one of the organizers of the California State Veterinary Medical Association's Women's Auxiliary, and the organizer of the Women's Auxiliary of the Bay Counties VMA. She also belonged to the Mobilized Women of Berkeley, the Arch of Emeralds of Herrick Hospital, the Berkeley Garden Club and was a charter member of Northbrae Women's Club.

In addition to her husband, Mrs. Cooke is survived by a daughter, Mrs. E. H. Kendall of Seattle, a brother, Dr. C. L. Roadhouse of Davis, and four grandchildren.

### **Applicants**

P. C. Enge, Davis. Vouchers: George H. Hart, Kenneth G. McKay.

Calvin F. Bennett, Pomona. Vouchers: A.

Mack Scott, C. H. Ozanian.

Herman R. Rossoll, San Diego. Vouchers: Fred B. Walker, Jr., W. W. Myers.

# California Veterinarians...

Do you have a Comprehensive Liability Policy?

MALPRACTICE INSURANCE



PREMISES and BUSINESS LIABILITY Coverage



Insurance on Animals in Care and Custody



PRODUCTS LIABILITY Coverage



SPECIAL PREMIUM 1 Year Standard Limits

E. C. SMITH COMPANY

1404 Franklin St., Oakland TEmplebar 6-4546 \$6000

or write to

CHARLES S. TRAVERS

Exec. Sec'y-CSVMA, 3004 16th St.

San Francisco



k/d for nephritic conditions.



p/d for reproduction, growth, and aid immunization.



r/d for obesity correction.

### EFFECTIVE RESULTS!

97.9% satisfactory results were obtained by veterinarians who prescribed k/d when nutritional therapy was indicated.

Percentages prepared by an independent testing laboratory PROVE the effectiveness of this prescription diet.







Write for complete information on therapeutic feeding.

## Prescription Diels for Dogs and Cals

Dispensed Only By Graduate Veterinarians

Hill Packing Company Topeka, Kansas

PROFESSIONAL PRODUCTS DIVISION



i/d for intestinal disorders.



c/d—special diet for cats (16 oz. size).



c/d—special diet for cats (8 oz. size).



f/d—a uniform biological basic foundation food.



### COMPLETE THERAPY

for mastitis in convenient dosage form

### DARIBIOTIC-AH

(NEOMYCIN-POLYMYXIN B with ANTIHISTAMINE)



### in the "dial-a-dose" syringe

Each 60 cc. multiple dose plastic syringe contains four doses

### EACH DOSE (15 cc.) CONTAINS:

Daribiotic-AH, in the "dial-a-dose" syringe, is available in cartons of 6. Four mastitis tips supplied with each syringe.

\*Licensed under U.S. Patent No. 2,565,057

The S. E. MASSENGILL Company veterinary division

Bristol, Tennessee

# Edual Barrel

(2-methyl-2-n-propyl-1, 3-propanediol dicarbamate) Licensed under U. S. Patent No. 2,724,720

provides a new dimension in small animal treatment



By its unique ability to control both mental agitation and muscular spasm, EQUANIL relieves nervousness, hysteria, viciousness and shyness in small animals.

In neurological conditions with associated muscle spasm, and in cases of muscle spasm due to rheumatic conditions, EQUANIL reduces muscular tension. EQUANIL also controls carsickness, idiopathic vomiting

and idiopathic pruritus, and is a useful diagnostic aid in lameness.

It accomplishes these highly desirable objectives safely and effectively.

AVAILABLE: EQUANIL Tablets, 400 mg. each, in bottles of 50.

Additional information will be sent to veterinarians on request.

SUPPLIED ONLY TO THE PROFESSIONS



PALATABLE CLINICAL DIETS!

## LANG'S CLINICAL FORMULAS

sold only through registered veterinarians

Formula "A" For aging dogs

For nephritic conditions
Formula "E"
For growing animals

For growing animals
For pregnant or nursing mothers

For pre-surgical and convalescence diets

Formula "O" For overweight dogs

Formula "G-I" For gastro-intestinal diseases

For "orphaned" pups

Formula "Cat" For diseases of the genito-urinary tract

For mature cats

Write for your professional samples

KAL KAN ...

# FED AND RECOMMENDED BY VETERINARIANS

Kal Kan Horsemeat with Gravy the West's largest selling horsemeat

Kal Kan M.P.S. chunk style meat products in sauce

Kal Kan Tuna all red meat tuna with sauce

Kal Kan "Jucy-Pak" bite-size chunks of fresh caught ocean fish in sauce

Kal Kan "Meal" and "Kibble" contain all the necessary vitamins and minerals

Thoro Fed Premium Gold Label Pet Foods

Basic Diet

Basic Meat with Raisins Added
Basic Meat with Liver Added

KAL KAN FOODS, INC.

Veterinary Division 3363 East 45th Street Los Angeles 58, California

3.8



HED AS PRESCA

# ari

Promazine Hydrochloride, Wyeth

HYDROCHLORIDE



### **CONTROLS AGITATION** IN SMALL AND LARGE ANIMALS

SPARINE controls central nervous system agitation commonly encountered in veterinary practice. In therapeutic doses, it produces a unique calming and quieting effect, inducing relaxation without loss of consciousness.

By replacing manual or mechanical restraint with "chemical restraint," Sparine reduces the risk of injury to patient and practitioner, enhances accuracy of diagnosis, and greatly simplifies treatment.

In X-ray examinations, otoscopic procedures, dentistry, and handling, SPARINE leaves the animal calm and manageable.

In cases of self-mutilation associated with eczema, pruritus, otitis, etc., its tranquilizing properties make it invaluable as adjunctive therapy.

MOST IMPORTANT: SPARINE, being effective in both oral and injectable forms, is useful for treating small and large animals. Its therapeutic potential is defined only by the requirements and ingenuity of the individual practitioner.

#### AVAILABLE:

Tablets: 25, 50 and 100 mg., bottles of 50 and 500; 200 mg., bottles of 500. Injection: 50 mg. per cc.,

vials of 2 and 10 cc.



SUPPLIED ONLY TO THE PROFESSIONS

Safe - Dependable - Finest Quality







Formulated especially for use and sale by Graduate Veterinarians. Made under the careful supervision of a pharmaceutical chemist to assure highest ethical standards.

FLEA & TICK BOMB-For dogs. Effective against insects resistant to Lindane, DDT, other chlorinated insecticides.

FLEA & TICK POWDER-For cats and dogs. Anti-static. Penetrates coat; allows powder to reach skin. Effective against insects resistant to Lindane, DDT, etc.

FLEA & TICK DIP-For dogs. Modified dip and shampoo. Effective against insects resistant to Lindane, DDT, other synthetic insecticides.

FOAM-BATH-For cats and dogs. All-weather dry bath contains lanolin and other essential oils to help prevent dryness of skin and coat.

**DEODORANT BOMB**—For Dogs. Bacteriostatic and fungistatic action attacks bacteria-produced odors; doesn't merely mask them. Refreshing fragrance.

> Order From Your Wholesaler or write direct to Whitmire

WHITMIRE RESEARCH LABORATORIES, INC. 339 S. Vandeventer Ave., St. Louis 10, Mo.



### CALIFORNIA STATE VETERINARY MEDICAL ASSN.

### Are You Protected This Way?

#### COVERAGES

**Bodily Injury Liability** 

\$25,000.00 each person. \$50,000.00 each occurrence.

Property Damage—Liability (Automobile)

As per vet. liability-aggregate products. \$5,000.00 each occurrence.

Property Damage—Liability (Except Automobile)

\$5,000.00 each occurrence. \$25,000.00 aggregate operations. \$25,000.00 aggregate protective. As per vet. liability-aggregate products.

Medical Payments (Automobile) \$25,000.00 aggregate contractual.

### **Veterinarian's Malpractice Liability**

- On and Off Premises Liability, Injury of Person, Destruction of
  - A. Breach of implied contract, re-straint, assault, slander, libel, alicious prosecution, replevin of property.
- 2. Malpractice Liability.
  - A. Professional services rendered, mistake, error, etc.
- 3. Animals in Care, Custody and Control of Doctor and Employees. Loss, theft, escape, self injury, burglary, robbery, etc.
- 4. Products Liability.
- A. Goods or products, sold, han-dled, or distributed by insured.
- 5. Contracted Liability.
  - A. Lease agreement, etc.

- loss to dog by fire, maximum \$1,000 per dog, \$25,000 aggregate."
- 6. Auto Non-Ownership Liability.
  - A. Protects insured if employees use own car for business purposes.
  - B. Automobile-hired, etc.
- Comprehensive Personal Liability.
  - A. Cover the insured for his per-sonal act, and that of his fam-ily, services of part-time domestic employees, etc.
- 8. COST FOR THE ABOVE \$94.85 PER YEAR.
- Owned Automobile at a Devi-ated Rate.
  - \*Subject to Audit.

D. W. MORRIS

4041 Mariton Ave.

Rm. 256, Los Angeles, Calif.

Phone: AX. 3-7169

or write to

**CHARLES S. TRAVERS** 

**Executive Secretary** 

CSVMA

3004 16th St., S. F. 3

### NEW TRIPLE ACTION ECTOPARASITICIDE



announcing

# Malingo

- 1. Malathion
- 2. Lindane
- 3. Chlordane

for prompt, effective control of

FLEAS · LICE · TICKS

SARCOPTIC & DEMODECTIC MANGE MITES

### ACTIVE INGREDIENTS:

Malathion (0,0-diethyl dithiophosphate of diethyl mercaptosuccinate) . . . . 1% Gamma Isomer of Benzene Hexachloride from Lindane . . . . . . 1% Technical Chlordane . . . . . . . . . . . . . 4%

Packages of 12 pints, and gallons.



### Your Expanded Group Disability Program Now in Force!

Take Advantage of This Low-Cost Plan NOW

Includes CSVMA Group Disability and Hospital-Surgical Expense Plan (World-Wide Coverage)

Special Hospital-Surgical Benefit for Member and All Dependents - Pays for Expenses Incurred, Including \$5,000 Blanket Polio Coverage

### Representatives for CSVMA Program:

### NORTHERN CALIFORNIA

Power & Dalziel 465 California Street San Francisco

### CENTRAL CALIFORNIA

H. D. Bartlett 315 Anglo Bank Bldg. Fresno

### SOUTHERN CALIFORNIA

Melvin Katleman 510 W. 6th Street Los Angeles

NATIONAL CASUALTY COMPANY · J. L. Toole, Gen. Agt. 315 Montgomery Street · EXbrook 2-2440 · San Francisco 4, California



VETERINARY SUPPLY COMPANY 34-28 31st St. . Long Island City 6. N. Y.

with dryer

CLIPS ON CAGE DOO

# Analgesic POWER



DEMEROL HYDROCHLORIDE ranks between morphine and codeine in analgesic power. Furthermore, it possesses marked spasmolytic and mild sedative action. It causes less nausea and vomiting and less urinary retention than morphine, and no constipation. The danger of respiratory depression is also greatly reduced with Demerol hydrochloride. Warning: May be habit forming.

Preanesthetic agent in dogs, for relief of colicky enteritis and intractable cough, asthma and other respiratory tract pain.

Particularly useful in any instance in which pain is a factor in the handling of a patient.

Well tolerated in cats.

For oral, subcutaneous and intramuscular administra-

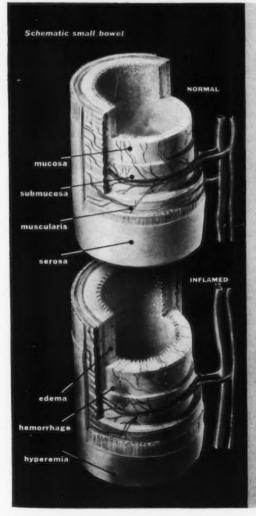
Ampuls of 1 cc. (50 mg.); 2 cc. (100 mg.); vials of 30 cc. (50 mg. per cc.); tablets of 50 and 100 mg. Narcotic blank

Winthrop LABORATORIES

Demerol hydrochloride

Demeral (brand of meperidine), trademark reg. U.S. Pat. Off.

# Kaobiotic\* Bolus for large animals



widening the usefulness of the highly effective Kaobiotic formulation in treating diarrheas of both large and small animals

KAOBIOTIC BOLUS, like the Suspension and Tablet, contains neomycin sulfate, four sulfonamides, pectin, and highly purified colloidal kaolin.

KAOBIOTIC BOLUS has an unusually rapid disintegration time; it disintegrates early and completely in the digestive tract; it can be suspended in liquid for oral administration; it can be crushed for adding to feed.

Sunnlied

BOLUS.....bottles of 50. SUSPENSION...pints and gallons. TABLETS.....bottles of 100.

# **Kaobiotic**

TRADEMARK, REG. U. E. PAT. OFF.



VETERINARY MEDICAL DEPARTMENT KALAMAZOO, MICHIGAN



## Coming...



TO BE WITH YOU AGAIN
TO GREET OUR MANY FRIENDS
AT BOOTH 50

NINETY-FOURTH
ANNUAL CONVENTION

AMERICAN
VETERINARY
MEDICAL
ASSOCIATION

CLEVELAND AUDITORIUM AUGUST 19-22 CLEVELAND, OHIO

PARKE-DAVIS Extends a Welcome to all Members



# para bomb...

... sprays away pet odor.

Kills fleas, lice and ticks on cats and

dogs. Ideal for spraying

kennels and

bedding...12 oz.

aerosol containers.



DIVISION OF

HAVER/LOCKART LABORATORIES

Kansas City, Missouri



### famous CALO PET FOODS home of

Visit this new, scientifically modern plant and see the network of electronic equipment which the CALO DOG FOOD COMPANY has installed to take the guesswork out of cooking. You'll see how every operation of the brisk, clean cannery is under the watchful eye of a trained technician to assure uniformity, sterilization and quality control of all Calo products. This careful attention to quality has been maintained by Calo for more than 30 years.

### YOU CAN SAFELY RECOMMEND CALO'S NUTRITIOUS DIET

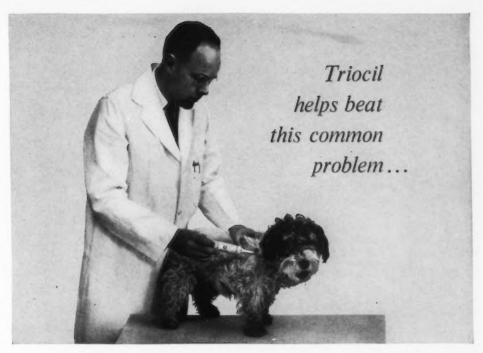


26 oz. King Size Calo Dog Food

- · fresh meat by-products
- · fresh ground bone
- soybean oil meal
- · cracked barley and wheat
- · fresh carrots
- · fresh horse meat
- · wheat germ
- · fresh meat
- · fresh horse meat by-products
- vitamin A and D feeding oil Plus FRESH FISH in Calo Cat Food

### CALO DOG FOOD CO., INC.

1755 Embarcadero, Oakland, California



### control topical infection fast

Topical infections—including those which won't respond to antibiotics—can be quickly controlled with Triocil. You'll find Triocil a valuable aid in treating skin infections, other dermatoses such as otitis externa, moist eczema, balanitis, cuts, lacerations, gland infections... in fact, in most external conditions where infection is a factor.

Triocil is effective because

 it has a broad-spectrum action, against single or mixed infections, gram-negative and grampositive bacteria;

- it has a strong affinity for tissue, resulting in a prolonged action;
- it remains active in the presence of pus or pus formers;
- no resistance to Triocil has developed in extensive clinical tests.

Administration: Triocil Ointment is applied directly to the affected area. It spreads easily, adheres well, does not stain. One application daily is usually sufficient, but treatment may be repeated if necessary.

**Supply:** Tubes of 20 and 50 grams, convenient for both hospital and office use and for dispensing.

Available exclusively through ethical veterinary distributors.

Triocil

DIVISION OF VETERINARY MEDICINE

WARNER-CHILCOTT

Laboratories.

MORRIS PLAINS. N.J.



# Skill, knowledge and experience

'he veterinarian is devoted to the esential task of preserving the health nd well-being of millions of head of vestock and of countless animal pets.

Their owners entrust him with this reat economic and humane responsiility because of their faith in his skill orn of long, thorough professional raining, coupled with wide experience 1 practice.

Our Veterinary Professional Serve Department functions exclusively to furnish the veterinarian with the research and resulting high quality products his practice requires.

The Cyanamid Veterinary Professional line, including the POLYOTIC® Tetracycline products, is sold only to veterinarians.

For detailed information write to VETERINARY PROFESSIONAL SERVICE DEPARTMENT, AMERICAN CYANAMID COMPANY, NEW YORK 20, N. Y.

CYANAMID







ferret origin

### FROMM

When DISTEMPEROID VIRUS was made available by Fromm Laboratories in 1939, it was the first live, biologically altered virus vaccine ever produced for use by the veterinary profession against canine distemper.

Today, the discerning veterinarian uses DISTEMPER-OID VIRUS as his agent of choice.

Used prophylactically, DISTEMPEROID VIRUS confers rapid immunity in one injection and has the plus factor of providing protection against Hard Pad disease. Used therapeutically in the primary stages of distemper, it has no equal.

Administer DISTEMPEROID VIRUS with confidence.

- Sold to graduate veterinarians only.
- Contact your local distributor.

### FROMM

Laboratories, Inc.

Grafton, Wisconsin, U.S.A.



VIABLIZED



FREE ON REQUEST

"Life with Rover" is an entertaining and informative 8-page booktet on the ancestry, diet and health-care of dogs. It's for free distribution to your dog owner clients. Ask your local distributor for a supply.



# new metabolic regulator restores muscle tone and vigor

Restoring hormonal balance in the aging dog often means increased vigor, better appetite, healthier skin and hair coat and, from all appearances, a "brighter outlook on life." Anabolin, the new metabolic regulator, helps do all this by providing a balanced combination of ethinyl estradiol, methyltestosterone and thyroid globulin.

The anabolic, protein-sparing effect of Anabolin helps overcome the effects of hormonal deficiencies or imbalances and strengthens the anabolic activities of the body. Anabolin is indicated in dogs of all ages to counter the catabolic effects of aging, injury, infection, faulty diet, surgery, parasitism.

Dosage: Usually one tablet daily. Larger dogs may require 2 tablets. Tablets are small and can easily be administered directly or in food. The beneficial effects of Anabolin usually become evident within 7 to 10 days but therapy should be continued as indicated.

Packaging: Bottles of 100 and 500.



DIVISION OF VETERINARY MEDICINE

WARNER-CHILCOTT

Laboratories MORRIS PLAINS. N. J.

When a "synergistic effect is desirable, combined drug therapy should be used...." Synergistic combinations are becoming

creasingly desirable

108 107 VIABLE BACTERIA PER STREPTOMYCIN 10 104 103 OF 0 10° PENICILLIN 10 11 12 13 DAYS AFTER INOCULATION

"In general practice, experience and clinical judgement are the only leads to proper therapy, and it is in such situations that combined therapy using synergistic combinations of antibiotics will find its greatest usefulness."1

supplied:

### COMBIOTIC P-S (DRY)

Single-dose vials and five-dose vials; each dose contains: 100,000 units penicillin G potassium, 300,000 units penicillin G procaine, and 1.0 Gm. dihydrostreptomycin.

### COMBIOTIC AQUEOUS SUSPENSION

Five-dose vials (10 cc.) and fifty-dose vials (100 cc.); each dose contains: 400,000 units penicillin G procaine, and 0.5 Gm. dihydrostreptomycin.

sold to veterinarians only

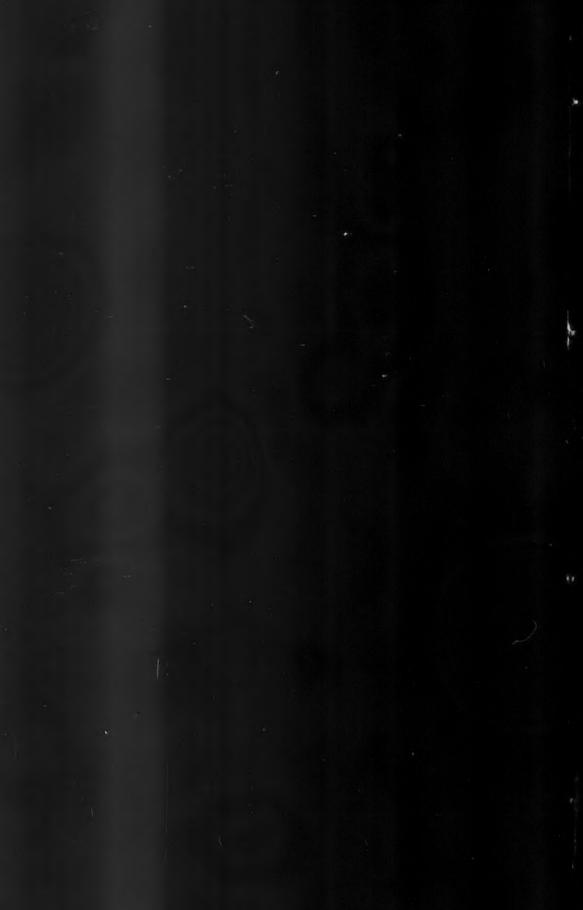
This graph presents the combined, synergistic antibacterial action of penicillin and streptomycin on a culture of Streptococcus liquefaciens (strain L. W.).2

1. Welch, H.: Antibiotic Med. & Clin. Therapy 3:375 (Nov.) 1956, 2. Adapted from Hunter, T. H.: J.A.M.A. 144:524 (Oct. 14) 1950.



Department of Veterinary Medicine, PFIZER LABORATORIES, Division, Chas. Pfizer & Co., Inc., Brooklyn 6, N. Y.







R<sub>L</sub> products are sold only to graduate veterinarians.

# sin-jex



Sin-jex is the first vaccine to utilize a vacuum-dried modified live virus distemper fraction with hepatitis killed virus as diluent. Sin-jex stimulates an early, lasting response; and assures protection against the two most common canine diseases... with one single injection.

Research Laboratories, Inc.

Saint Joseph,

Missouri

# it takes all three to make a superior RABIES VACCINE

COMMERCIAL VACCINE COMPARISON	1	2	3
product ▼	tissue concentration	particle size	reconstitution
A	9%	large	very poor
B	10%	medium	very poor
C	7% !	fine	l fair
D	13%	medium	very poor
Jen-Sal >	13%	very fine	excellent

maximum tissue concentration for dependable immunity High tissue content of Jen-Sal Rabies Vaccine provides high vaccine virus titres for maximum immune response. In critical tests, dogs vaccinated with a standard 3 cc. dose of Jen-Sal vaccine consistently withstood virulent street virus challenge.

homogenized tissue for rapid reconstitution Jen-Sal Rabies vaccine reconstitutes in seconds. Tissue particles, minute enough to permit passage through a 24 gauge needle, assure a vaccine which is both effective and easy to administer. No evidence of undue pain or local irritation is noted or routine administration.

newest production refinements give you a superior product Jen-Sal Rabies Vaccine con tains living, safety-proved Flury virus modified by egg passage. Virus loss in storage is inhibited by new lyophilization refinements plus a Jen-Sal stabilizing agent. Meticulous control and rigorous testing guarantee a uniform vaccine of incomparable quality. Supplied in 10 dose bulk vial and 5-1 dose package.

JENSEN-SALSBERY LABORATORIES, INC. KANSAS CITY, MISSOURI



